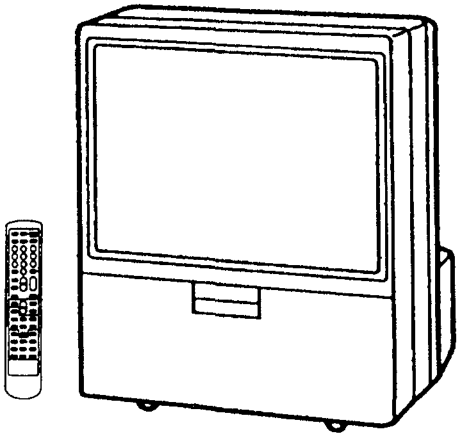
KP-46S55/53S55
RM-Y125

SERVICE MANUAL



US Model

KP-46S55
Chassis No. SCC-F19T-A
KP-53S55
Chassis No. SCC-F19U-A

Canadian Model

KP-46S55
Chassis No. SCC-F23H-A
KP-53S55
Chassis No. SCC-F23J-A

AP CHASSIS

MODELS OF THE SAME SERIES	
KP-46S55/53S55	KP-46XBR25/53XBR25/61XBR28
KP-46V15/46V16 KP-53V15/53V16/61V15	KP-46XBR35/53XBR35/61XBR38
	KP-41EXR96

SPECIFICATIONS

Projection system	3 picture tubes, 3 lenses, horizontal in-line system
Picture tube	7 inch high-brightness monochrome tubes (5.5 raster size), with optical coupling and liquid cooling system
Projection lenses	High performance, large-diameter hybrid lens F1 0
Screen size	KP-46S55: 46 inches (measured diagonally) KP-53S55: 53 inches (measured diagonally)
Screen brightness	KP-46S55: 1,600 cd/㎡ KP-53S55: 1,250 cd/㎡
Television system	American TV standards
Channel coverage	VHF: 2-13 UHF: 14-69 CATV: 1-125
Antenna	75-ohm external antenna terminal for VHF/UHF

Inputs/output VIDEO IN 1
- S VIDEO IN (4-pin mini DIN) :
  - Y : 1 Vp-p, 75-ohms unbalanced, sync negative
  - C : 0.286 Vp-p (Burst signal), 75-ohms
- VIDEO (phono jack) :
  - 1 Vp-p, 75-ohms unbalanced, sync negative
- AUDIO (phono jacks) :
  - 500 m V rms (100% modulation)
  - Impedance : 47 kilo-ohms

VIDEO IN 2 and 3
- VIDEO (phono jacks) :
  - 1 Vp-p, 75-ohms unbalanced, sync negative
- AUDIO (phono jacks) :
  - 500 m V rms (100% modulation)
  - Impedance : 47 kilo-ohms

AUDIO OUT (phono jacks) :
- 900 m V rms (100% modulation)
- Impedance : 5 kilo-ohms

- Continued on next page -

COLOR REAR VIDEO PROJECTOR

SONY®

MICROFILM

Speaker	Full range speaker 160 mm (6.3 inches) diameter
Speaker output	10W×2
Power requirements	120 V, 60Hz
Power consumption	Max. 310 W Average : 255 W Standby mode : 7 W
Dimensions (W/H/D)	KP-46S55 : 1,029×1,287×535 mm (40 5/8×50 3/4×21 1/8 inches) KP-53S55 : 1,164×1,336×644 mm (45 7/8×52 5/8×25 3/8 inches)

Mass	KP-46S55 : 90 kg (198 lbs 7 oz) KP-53S55 : 92 kg (202 lbs 7 oz)
Supplied accessories	Remote commander RM-Y125 (1) Size AA (R6) battery (1)
Optional accessories	U/V mixer EAC-66 Connecting cables RK-74A, VMC-810S/820S, YC-15V/30V, VMC-720M VCR tray SU-PJT1

Design and specifications are subject to change without notice.

(CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

(ATTENTION)

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURTCIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS ÁLA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

SAFETY CHECK-OUT

(US model only)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

1. Check the area of your repair for unsoldered or poorly-soldered connections Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced Be absolutely certain that you have replaced all the insulators
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement
8. Check the B+ and HV to see they are at the values specified Make sure your instruments are accurate;be suspicious of your HV meter if sets always have low HV
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5mA (500 microampers) Leakage current can be measured by any one of three methods

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable Nearly all battery operated digital multimeters that have a 2V AC range are suitable (See Fig A)

HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground,the cover-plate retaining screw on most AC outlet boxes is also at earth ground If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential (See Fig. B)

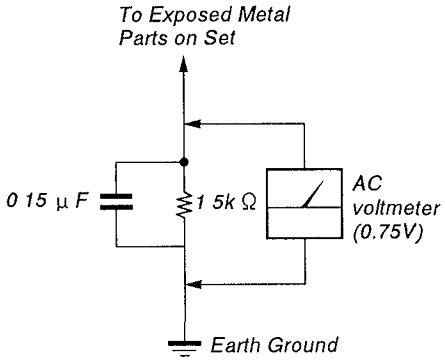


Fig A Using an AC voltmeter to check AC leakage.

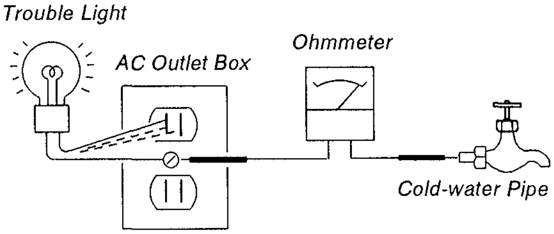


Fig B. Checking for earth ground.

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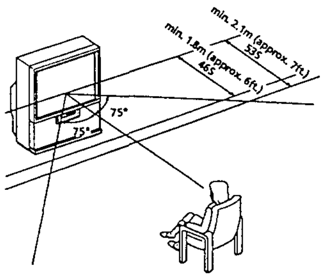
SECTION 1
GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remein as in the manual.

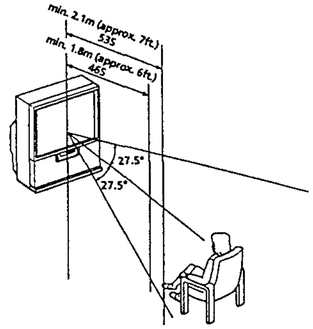
Step 1: Installing the projection TV

For the best picture quality, install the projection TV within the areas shown below.

Optimum viewing area (Horizontal)


min. 2.1m (approx. 7ft.)
535
min. 1.8m (approx. 6ft.)
465
75°
75°

Optimum viewing area (Vertical)

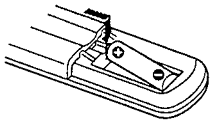

min. 2.1m (approx. 7ft.)
535
min. 1.8m (approx. 6ft.)
465
27.5°
27.5°

Preparing for your projection TV

Before you use your projection TV, adjust convergence. For the procedure, see "Step 4: Adjusting convergence (CONVERGENCE)" on page 10.

Step 3: Setting up the remote commander

Insert one size AA (R6) battery (supplied) by matching the + and – on the battery to the diagram inside the battery compartment.

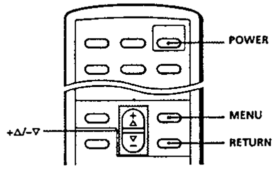


Notes

- With normal use, the battery should last for approximately six months.
- If you do not use the remote commander for an extended period of time, remove the battery to avoid possible damage from battery leakage.
- Do not handle the remote commander roughly. Do not drop it, step on it or let it get wet.
- Do not place the remote commander in direct sunlight, near a heater, or where the humidity is high.

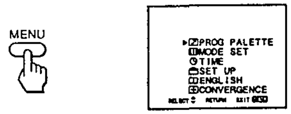
Step 4: Adjusting convergence
(CONVERGENCE)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.

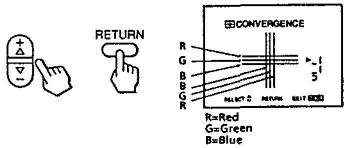

POWER
MENU
RETURN
+△/–▽

1 **Press POWER to turn on the projection TV.**
The TIMER/STAND BY indicator flashes until the picture appears.

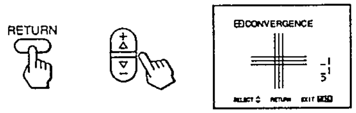
2 **Press MENU.**
The main menu appears.


MENU
▶PROG PALETTE
MODE SET
TIME
SET UP
ENGLISH
CONVERGENCE
SELECT
RETURN
EXIT

3 **Press + △ or – ▽ to move the cursor (▶) to CONVERGENCE and press RETURN.**
The CONVERGENCE adjustment screen appears.

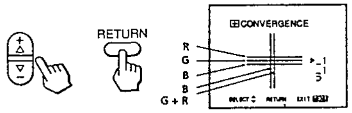

RETURN
CONVERGENCE
R
G
B
B
G
R
5
SELECT
RETURN
EXIT
R=Red
G=Green
B=Blue

4 Press + △ or – ▽ to move the cursor (▶) to the symbol showing the line you want to adjust, and press RETURN.


RETURN
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

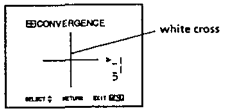
|: Red vertical line (left/right adjustment)
—: Red horizontal line (up/down adjustment)
|: Blue vertical line (left/right adjustment)
—: Blue horizontal line (up/down adjustment)

5 Press + △ or – ▽ to move the line until it converges with the center green line, and press RETURN.


RETURN
CONVERGENCE
R
G
B
B
G + R
SELECT ⇕ RETURN EXIT MENU

To move up/right, press + △.
To move down/left, press – ▽.

6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.


CONVERGENCE
white cross
SELECT ⇕ RETURN EXIT MENU

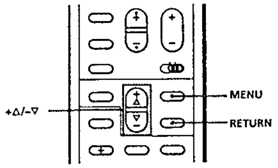
7 Press MENU to return to the original screen.

Note

- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

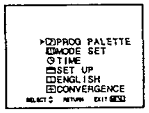
Step 5: Setting cable TV on or off

If you have connected the projection TV to a cable TV system, you should set the cable connection on or off. Set CABLE to ON, the factory setting, to preset or watch cable TV channels. Set to OFF to preset or watch VHF/UHF channels.


+△/–▽
MENU
RETURN

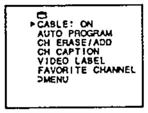
1 Press MENU.

The main menu appears.


▶PROG PALETTE
MODE SET
TIME
SET UP
ENGLISH
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

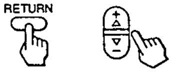
2 Press + △ or – ▽ to move the cursor (▶) to SET UP and press RETURN.

The SET UP menu appears.


▶CABLE: ON
AUTO PROGRAM
CH ERASE/ADD
CH CAPTION
VIDEO LABEL
FAVORITE CHANNEL
MENU

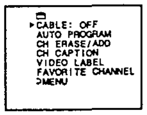
3 Set CABLE to ON or OFF:

(1) Make sure the cursor (▶) is beside CABLE and press RETURN.
If the cursor is not beside CABLE, press + △ or – ▽ to move the cursor and press RETURN.



(2) Press + △ or – ▽ to select ON or OFF.

(3) Press RETURN.


▶CABLE: OFF
AUTO PROGRAM
CH ERASE/ADD
CH CAPTION
VIDEO LABEL
FAVORITE CHANNEL
MENU

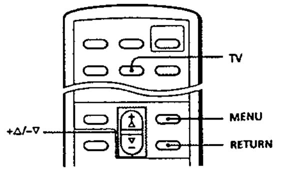
4 Press MENU to return to the original screen.

Note

- If CABLE appears in black, the projection TV is set to a video input and you cannot select CABLE. Press TV on the remote commander so that a channel number appears.

Step 6: Presetting channels

You can preset TV channels easily: first store all the receivable VHF, UHF or cable TV channels automatically following the procedure below, then erase unnecessary channels or add the channels you want.

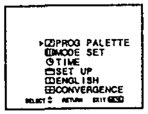

TV
+△/–▽
MENU
RETURN

Presetting all the receivable channels

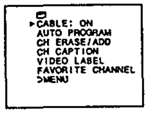
Before you begin, set the cable TV on or off according to the channels you want to preset. (page 11)

1 Press MENU.

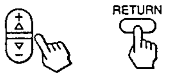
The main menu appears.


▶PROG PALETTE
MODE SET
TIME
SET UP
ENGLISH
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

2 Press + △ or – ▽ to move the cursor (▶) to SET UP and press RETURN.


▶CABLE: ON
AUTO PROGRAM
CH ERASE/ADD
CH CAPTION
VIDEO LABEL
FAVORITE CHANNEL
MENU

3 **Press + △ or – ▽ to move the cursor (▶) to AUTO PROGRAM and press RETURN.**



"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

Notes
- If AUTO PROGRAM appears in black in the SET UP menu, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press TV on the remote commander so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

Erasing or adding channels

1 **Press MENU.**

2 **Press + △ or –▽ to select SET UP and press RETURN.**

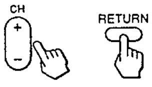
3 **Press + △ or – ▽ to select CH ERASE/ADD and press RETURN.**

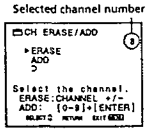
4 **Erase and/or add the channel you want:**

To erase an unwanted channel

(1) Make sure the cursor (▶) is beside ERASE.

(2) Press CH + or – to select the channel you want to erase.




Selected channel number
CH ERASE/ADD
8
▶ERASE
ADD
SELECT ⇕ RETURN EXIT MENU

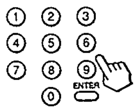
Select the channel.
ERASE:CHANNEL +/–
ADD: [0–9]+[ENTER]

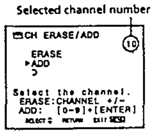
(3) Press RETURN.
The indication "–" appears beside the channel number, showing that the channel is erased from the preset memory.

To add a channel that you want

(1) Press + △ or – ▽ to select ADD.

(2) Press 0 – 9 button to select the channel you want to add and press ENTER.


1
2
3
4
5
6
7
8
9
0
ENTER


Selected channel number
CH ERASE/ADD
10
ERASE
▶ADD
SELECT ⇕ RETURN EXIT MENU

Select the channel.
ERASE:CHANNEL +/–
ADD: [0–9]+[ENTER]

(3) Press RETURN.
The indication "+" appears beside the channel number, showing that the channel is added to the preset memory.

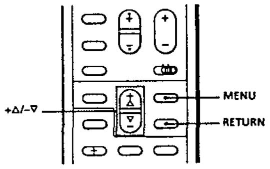
5 **To erase and/or add other channels, repeat step 4.**

6 **When you finish, press MENU.**

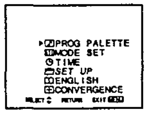
Note
- If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.

Changing the menu language

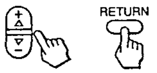
If you prefer Spanish or French to English, you can change the menu language.

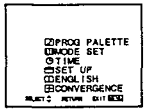

+△/–▽
MENU
RETURN

1 **Press MENU.**
The main menu appears.

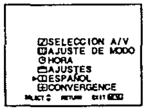

▶PROG PALETTE
MODE SET
TIME
SET UP
ENGLISH
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

2 **Press + △ or – ▽ to move the cursor (▶) to ENGLISH and press RETURN.**




PROG PALETTE
MODE SET
TIME
SET UP
ENGLISH
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

3 **Press + △ or – ▽ to select the language and press RETURN.**
The menu in selected language appears.

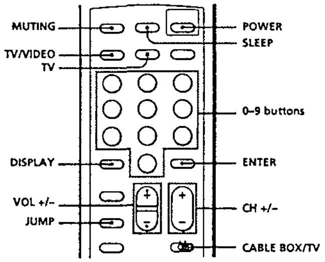

SELECCION A/V
AJUSTE DE MODO
HORA
AJUSTES
▶ESPAÑOL
CONVERGENCE
SELECT ⇕ RETURN EXIT MENU

4 **Press MENU to return to the original screen.**

Note
- Even when you select Spanish or French language, certain parts of the menus remain in English.

Watching TV programs

Check that the CABLE BOX/TV selector is set to TV.

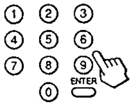

MUTING
TV/VIDEO
TV
DISPLAY
VOL +/-
JUMP
POWER
SLEEP
0–9 buttons
ENTER
CH +/-
CABLE BOX/TV

1 Press POWER to turn on the projection TV.
The TIMER/STAND BY indicator flashes until the picture appears.

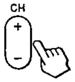
If "VIDEO" appears on the screen, press TV so that a channel number appears.

2 Select the channel you want to watch:

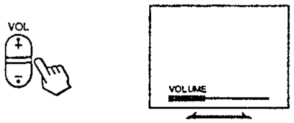
To select a channel directly
Press the 0 – 9 buttons and then press ENTER.
For example, to select channel 10, press 1, 0 and ENTER.


1
2
3
4
5
6
7
8
9
ENTER
0

To scan through channels
Press CH +/– until the channel you want to watch appears.

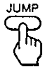


3 Press VOL +/- to adjust the volume.



Switching quickly between two channels

Press JUMP.
The channel you watched previously appears.



Pressing JUMP again switches back the channel.

Muting the sound

Press MUTING.
"MUTING" appears on the screen.

To restore the sound, press MUTING again, or press VOL +.

Displaying on-screen information

Use this feature to check the channel number, current time, channel caption (if set), and MTS mode (if SAP is selected).

Press DISPLAY.

To cancel the display, press DISPLAY again.

Setting the Sleep Timer

The projection TV stays on for the length of time you specify and then shuts off automatically.

Press SLEEP repeatedly until the time (in minutes) you want appears.
Each time you press SLEEP, the time changes as follows: 30 → 60 → 90 → OFF.

"SLEEP" appears about one minute before the projection TV shuts off.

To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn off the projection TV.

Watching a video input picture

Press TV/VIDEO repeatedly until the desired video input appears.
Each time you press TV/VIDEO, the display changes as follows: TV → VIDEO 1 → VIDEO 2 → VIDEO 3.

To return to TV picture, press TV.

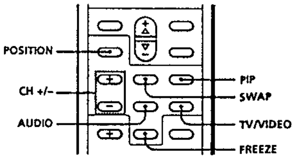
Previewing the menu displays

Press DEMO on the front of the projection TV.
Menus are displayed one by one.

To cancel Demo function, press any button.

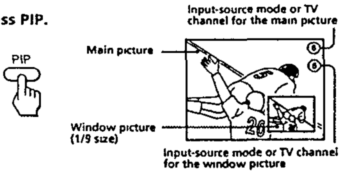
Watching two programs at one time — PIP

The Picture-in-Picture (PIP) feature allows you to watch both the main picture and a window picture simultaneously.
You can watch two TV channels at one time by connecting a VCR. See "Connecting an antenna/cable TV system with a VCR" (page 7) for connections.

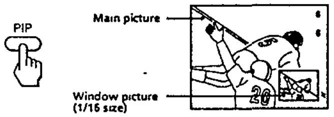

POSITION
CH +/-
AUDIO
PIP
SWAP
TV/VIDEO
FREEZE

Displaying a window picture

Press PIP.


PIP
Input-source mode or TV channel for the main picture
Main picture
Window picture (1/9 size)
Input-source mode or TV channel for the window picture

Press PIP again to display a smaller window picture.


PIP
Main picture
Window picture (1/16 size)

Each time your press PIP, the size of the window picture changes as follows: 1/9 size → 1/16 size → OFF.

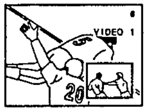
To remove the window picture, press PIP repeatedly until the window picture disappears.

Notes

- If the main picture is not receiving an image, the window picture may be in black and white.
- The window picture sound is also output from the AUDIO OUT jacks when you listen to it.

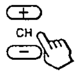
Changing the window picture input mode

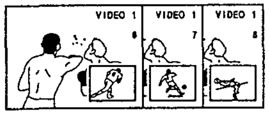
Press TV/VIDEO in the PIP control area of the remote commander to select the input mode.
Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



Changing TV channels in the window picture

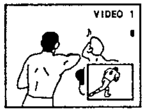
Press CH +/– in the PIP control area.




VIDEO 1
6
VIDEO 1
7
VIDEO 1
8

Listening to the sound of the window picture

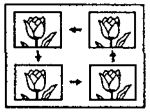
Press AUDIO.
"♪" appears for a few seconds, indicating that the window picture sound is being received.



To restore the main picture sound, press AUDIO again.

Changing the position of the window picture

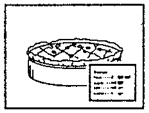
Press POSITION.
Each time you press POSITION, the window picture will move as illustrated.



Freezing the window picture

This feature is useful when you want to write down a recipe from a cooking program, a displayed address or a phone number and so on.

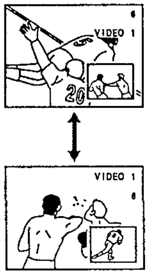
Press FREEZE.



To restore the normal screen, press FREEZE again.

Swapping the main and window pictures

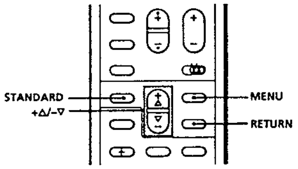
Press SWAP.
Each time you press SWAP, the images and sound from the main and window pictures switch places with another.


VIDEO 1
20
VIDEO 1

Selecting picture and sound effects

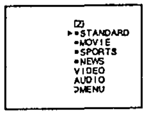
(PROGRAM PALETTE)

You can select one of four settings for picture and sound effects that best suits the program.

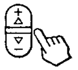

STANDARD
+Δ/–∇
MENU
RETURN

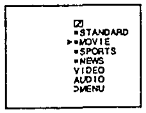
1 Press MENU.

2 Make sure the cursor (▶) is beside PROG PALETTE and press RETURN.
If the cursor is not beside PROG PALETTE, press + Δ or – ∇ to move the cursor and press RETURN.


▶•STANDARD
•MOVIE
•SPORTS
•NEWS
VIDEO
AUDIO
⊃MENU

3 Select the item you want. For example:
(1) To select MOVIE, press + Δ or – ∇ to move the cursor to MOVIE.




•STANDARD
▶•MOVIE
•SPORTS
•NEWS
VIDEO
AUDIO
⊃MENU

(2) Press RETURN.

For details on each item, see "Effect of four items" in the right column.

Effect of four items

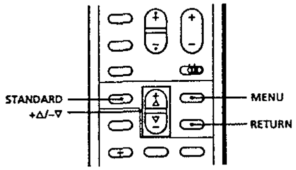
Item	Picture effect	Sound effect
STANDARD	Standard (factory preset levels)	Standard (factory preset levels)
MOVIE	Finely detailed picture	Theatrical audio effect
SPORTS	Vivid, bright picture	Sound with a sports stadium effect
NEWS	Reduced noise in picture	Clear voice reproduction

Selecting STANDARD with a button on the remote commander

Press STANDARD.

Adjusting the picture (VIDEO)

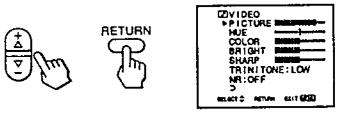
When watching TV programs, you can adjust the quality of the picture to suit your taste.
You can adjust the picture of video input(s) as well, and these settings are stored separately from those for the broadcast signal.


STANDARD
+Δ/–∇
MENU
RETURN

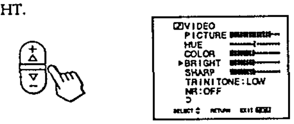
1 **Press MENU.**

2 **Make sure the cursor (▶) is beside PROG PALETTE and press RETURN.**

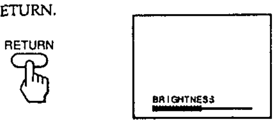
3 **Press + Δ or – ∇ to move the cursor to VIDEO and press RETURN.**
The VIDEO adjustment menu appears.


RETURN
VIDEO
▶PICTURE
HUE
COLOR
BRIGHT
SHARP
TRINITONE:LOW
NR:OFF
SELECT
RETURN
EXIT

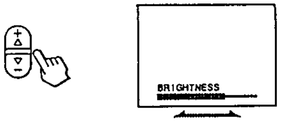
4 **Select the item you want to adjust.**
For example:
(1) To adjust brightness, press + Δ or – ∇ to select BRIGHT.


VIDEO
PICTURE
HUE
COLOR
▶BRIGHT
SHARP
TRINITONE:LOW
NR:OFF
SELECT
RETURN
EXIT

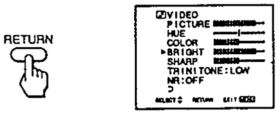
(2) Press RETURN.


RETURN
BRIGHTNESS

5 **Adjust the selected item:**
(1) Press + Δ or – ∇ to adjust the item.


BRIGHTNESS

(2) Press RETURN.
The new setting appears in the VIDEO menu.


RETURN
VIDEO
PICTURE
HUE
COLOR
▶BRIGHT
SHARP
TRINITONE:LOW
NR:OFF
SELECT
RETURN
EXIT

For details on each item, see "Description of adjustable items" below.

6 **To adjust other items, repeat steps 4 and 5.**

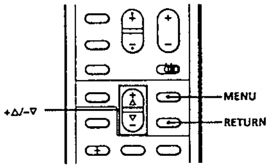
Description of adjustable items

Item	Press + Δ to	Press – ∇ to
PICTURE	Increase picture contrast for vivid color	Decrease picture contrast for soft color
HUE	Make overall picture greenish	Make overall picture purplish
COLOR	Increase color intensity	Decrease color intensity
BRIGHT	Brighten the picture	Darken the picture
SHARP	Sharpen the picture	Soften the picture

To restore the factory settings
Press STANDARD while the VIDEO menu is displayed. All the settings except for PICTURE are restored to the factory settings.
You can also do this by selecting STANDARD in the PROG PALETTE menu.

Adjusting the color temperature (TRINITONE)

The TRINITONE feature controls the color temperature, permitting white balance preference adjustment without affecting skin tones.

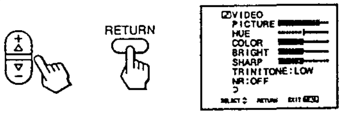

+Δ/–∇
MENU
RETURN

1 **Press MENU.**

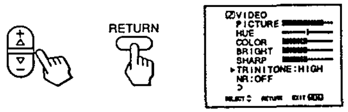
2 **Make sure the cursor (▶) is beside PROG PALETTE, and press RETURN.**

3 **Press + Δ or – ∇ to select VIDEO and press RETURN.**

4 **Press + Δ or – ∇ to select TRINITONE and press RETURN.**


RETURN
VIDEO
PICTURE
HUE
COLOR
BRIGHT
SHARP
TRINITONE:LOW
NR:OFF
SELECT
RETURN
EXIT

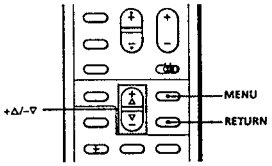
5 **Press + Δ or – ∇ to select LOW or HIGH and press RETURN.**


RETURN
VIDEO
PICTURE
HUE
COLOR
BRIGHT
SHARP
▶TRINITONE:HIGH
NR:OFF
SELECT
RETURN
EXIT

Choose	To
LOW	Make the white color reddish.
HIGH	Make the white color bluish.

Reducing picture noise (NR)

You can reduce picture noise when NR is set to ON.

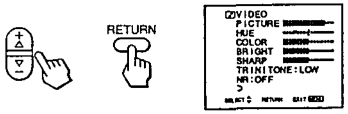

+Δ/–∇
MENU
RETURN

1 **Press MENU.**

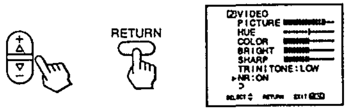
2 **Make sure the cursor (▶) is beside PROG PALETTE, and press RETURN.**

3 **Press + Δ or – ∇ to select VIDEO and press RETURN.**

4 **Press + Δ or – ∇ to select NR and press RETURN.**

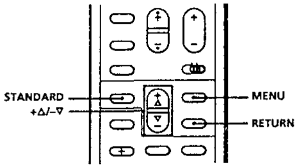

RETURN
VIDEO
PICTURE
HUE
COLOR
BRIGHT
SHARP
TRINITONE:LOW
NR:OFF
SELECT
RETURN
EXIT

5 **Press + Δ or – ∇ to select ON and press RETURN.**


RETURN
VIDEO
PICTURE
HUE
COLOR
BRIGHT
SHARP
TRINITONE:LOW
▶NR:ON
SELECT
RETURN
EXIT

Adjusting sound
(AUDIO)

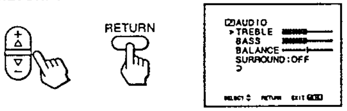
You can adjust the quality of the TV sound to suit your taste. You can adjust the sound of video input(s) as well, and these settings are stored separately from those for the broadcast signal.


STANDARD
+Δ/–∇
MENU
RETURN

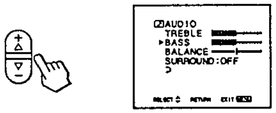
1 **Press MENU.**

2 **Make sure the cursor (▶) is beside PROG PALETTE, and press RETURN.**

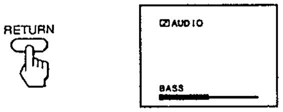
3 **Press + Δ or – ∇ to select AUDIO and press RETURN.**


RETURN
AUDIO
▶TREBLE
BASS
BALANCE
SURROUND:OFF
SELECT
RETURN
EXIT

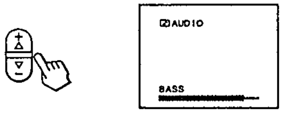
4 **Select the item you want to adjust.**
For example:
(1) To adjust bass, press + Δ or – ∇ to select BASS.


AUDIO
TREBLE
▶BASS
BALANCE
SURROUND:OFF
SELECT
RETURN
EXIT

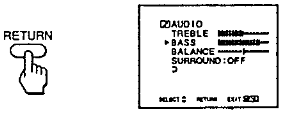
(2) Press RETURN.


RETURN
AUDIO
BASS

5 **Adjust the selected item:**
(1) Press + Δ or – ∇ to adjust the item.



(2) Press RETURN.
The new setting appears in the AUDIO menu.


RETURN
AUDIO
TREBLE
▶BASS
BALANCE
SURROUND:OFF
SELECT
RETURN
EXIT

For details on each item, see "Description of adjustable items" below.

6 **To adjust other items, repeat steps 4 and 5 above.**

Description of adjustable items

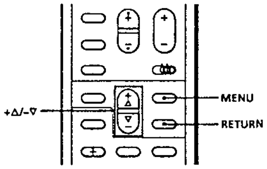
Item	Press + Δ to	Press – ∇ to
TREBLE	Increase the treble response	Decrease the treble response
BASS	Increase the bass response	Decrease the bass response
BALANCE	Emphasize the right speaker's volume	Emphasize the left speaker's volume

To restore the factory settings

Press STANDARD while the AUDIO menu is displayed.
You can also do this by selecting STANDARD in the PROG PALETTE menu.

Listening to surround sound
(SURROUND)

The SURROUND feature simulates sound reproduction with the atmosphere of a movie theater or a concert hall. Surround sound is only effective for stereo programs.

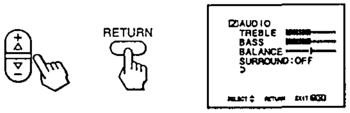

+Δ/–∇
MENU
RETURN

1 **Press MENU.**

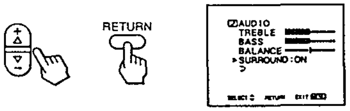
2 **Make sure the cursor (▶) is beside PROG PALETTE, and press RETURN.**

3 **Press + Δ or – ∇ to select AUDIO and press RETURN.**

4 **Press + Δ or – ∇ to select SURROUND and press RETURN.**

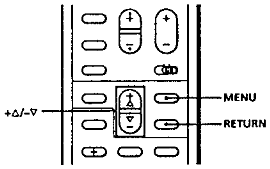

RETURN
AUDIO
TREBLE
BASS
BALANCE
SURROUND:OFF
SELECT
RETURN
EXIT

5 **Press + Δ or – ∇ to select ON and press RETURN.**


RETURN
AUDIO
TREBLE
BASS
BALANCE
▶SURROUND:ON
SELECT
RETURN
EXIT

Selecting stereo or bilingual programs
(MTS)

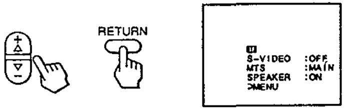
The Multichannel TV Sound (MTS) feature gives you the choice to enjoy stereo sound or Second Audio Programs (SAP) when available. The initial setting is stereo sound (MAIN).


+Δ/–∇
MENU
RETURN

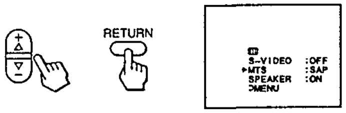
1 **Press MENU.**

2 **Press + Δ or – ∇ to select MODE SET and press RETURN.**

3 **Press + Δ or – ∇ to select MTS and press RETURN.**


RETURN
S-VIDEO :OFF
MTS :MAIN
SPEAKER :ON
MENU

4 **Press + Δ or – ∇ to select MAIN, SAP or MONO and press RETURN.**

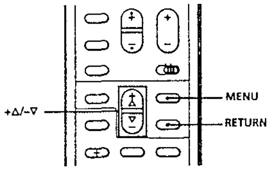

RETURN
S-VIDEO :OFF
▶MTS :SAP
SPEAKER :ON
MENU

Choose	To
MAIN	Listen to stereo sound. The STEREO indicator on the projection TV lights up while a stereo broadcast is received.
SAP	Listen to bilingual programs. The sound of non-SAP programs will be muted when SAP is selected.
MONO	Reduce noise during stereo broadcasts.

Note
- Stereo and SAP sounds are subject to program sources.

Setting the speaker switch (SPEAKER)

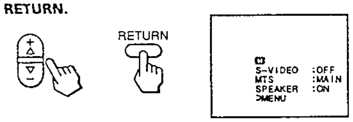
You may switch off the projection TV speakers when, for example, you want to listen to the sound through a stereo system.



1 Press MENU.

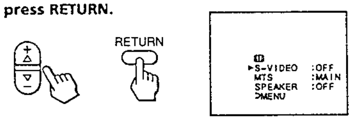
2 Press + △ or – ▽ to select MODE SET and press RETURN.

3 Press + △ or – ▽ to select SPEAKER and press RETURN.



```
S-VIDEO    :OFF
MTS        :MAIN
SPEAKER    :ON
>MENU
```

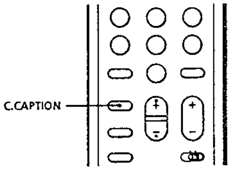
4 Press + △ or – ▽ to select ON or OFF and press RETURN.



```
▶S-VIDEO   :OFF
 MTS       :MAIN
 SPEAKER   :OFF
 >MENU
```

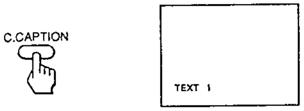
Displaying closed caption

Some programs are broadcast with Closed Caption (Caption Vision). To display Closed Caption, select either CC1, CC2, TEXT1 or TEXT2 with the C.CAPTION button.
CC1 or CC2 shows you a caption, that is a printed version of the dialog or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1 or TEXT2 shows you text, that is information presented using half to full of the screen. It is usually not related to the program.



Press C.CAPTION repeatedly to select the closed caption mode.
Each time you press C.CAPTION, the mode changes as shown blow.

CC OFF→CC 1→CC 2→TEXT 1→TEXT 2



```
TEXT 1
```

If you do not want to display Closed Caption or Text, select CC OFF.

Note

- Captions may appear with a white box or another error instead of a certain word. Poor reception of TV programs can also cause errors in Closed Caption.

Setting daylight saving time (DAYLIGHT SAVING)

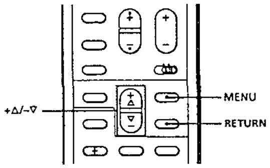
If your area uses daylight saving time, change DAYLIGHT SAVING setting depending on the season, before setting the current time.

Daylight saving start

- After the first Sunday in April, set DAYLIGHT SAVING to YES. Current time (page 25), On/off Timer (page 26) and Channel Block (page 27) settings automatically move one hour ahead.

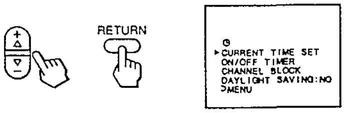
Daylight saving end

- After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time, On/off Timer and Channel Block settings automatically move one hour back.



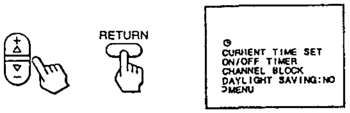
1 Press MENU.

2 Press + △ or – ▽ to move the cursor (▶) to TIME and press RETURN.



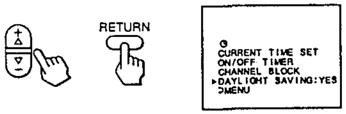
```
▶CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 DAYLIGHT SAVING:NO
 >MENU
```

3 Press + △ or – ▽ to select DAYLIGHT SAVING and press RETURN.



```
CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
DAYLIGHT SAVING:NO
>MENU
```

4 Press + △ or – ▽ to select YES or NO and press RETURN.

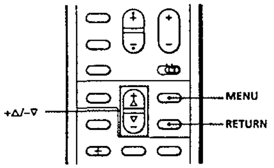


```
 CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
▶DAYLIGHT SAVING:YES
 >MENU
```

Choose	To
YES	Set for daylight saving start
NO	Set for daylight saving end

Setting the clock
(CURRENT TIME SET)

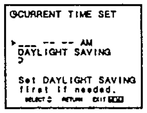
Set the current time before using On/off Timer (page 26) and Channel Block features (page 27). For example, set the clock to 3:15 p.m., Monday.



1 Press MENU.

2 Press + Δ or – ∇ to select TIME and press RETURN.

3 Make sure the cursor (▶) is beside CURRENT TIME SET, and press RETURN.
If the cursor is not beside CURRENT TIME SET, press + Δ or – ∇ to move the cursor and press RETURN.

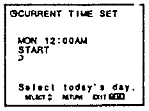


```
⊙CURRENT TIME SET

▶___ -- -- AM
 DAYLIGHT SAVING
 ↩

 Set DAYLIGHT SAVING
 first if needed.
```

If you need to set DAYLIGHT SAVING, follow the procedure on the previous page.

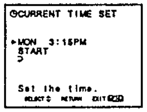
4 Set the current time.
(1) Press RETURN to start setting the time.

(2) Press + Δ or – ∇ to select the day of the week and press RETURN.



```
⊙CURRENT TIME SET

 MON 12:00AM
 START
 ↩

 Select today's day.
```

(3) Using + Δ or – ∇ and RETURN, select hour and minute in the same way as in step (2).



```
⊙CURRENT TIME SET

▶MON  3:15PM
 START
 ↩

 Set the time.
```

5 Press + Δ or – ∇ to select START and press RETURN.
The clock starts working.

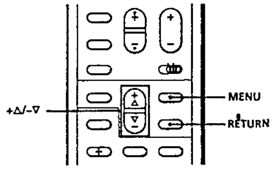
To correct the time
Display the CURRENT TIME SET screen and repeat steps above.

To display the current time
Press DISPLAY.

Note
- If you unplug the projection TV or a power interruption occurs, the clock will be erased. Reset the current time.

Turning the projection TV on and off automatically (ON/OFF TIMER)

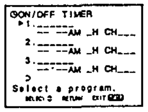
The ON/OFF TIMER feature allows you to make the TV program of your choice appear on the screen at your specified time.



1 Press MENU.

2 Press + Δ or – ∇ to select TIME and press RETURN.

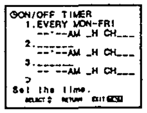
3 Press + Δ or – ∇ to select ON/OFF TIMER and press RETURN.



```
⊙ON/OFF TIMER
 ▶1.-------
    -- --AM _H CH___
  2.-------
    -- --AM _H CH___
  3.-------
    --·--AM _H CH___
  ↩
Select a program.
```

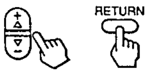
4 Enter the ON/OFF TIMER setting.
(1) To set program 1, press RETURN.
To set program 2 or 3, press + Δ or – ∇ to select that program and press RETURN.

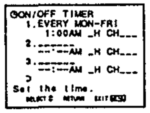
(2) Press + Δ or – ∇ to select the day of the week and press RETURN.
Each time you press + Δ or – ∇, the day of the week changes as shown below.
EVERY SUN-SAT→EVERY MON-FRI→ SUNDAY→MONDAY→...→SATURDAY→ " ——(blank)"→EVERY SUN→EVERY MON →...→EVERY SAT



```
⊙ON/OFF TIMER
  1.EVERY MON-FRI
    --·--AM _H CH___
  2.-------
    --·--AM _H CH___
  3.-------
    -- --AM _H CH___
  ↩
Set the time.
```

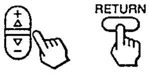
(3) Press + Δ or – ∇ to select the starting hour and press RETURN.

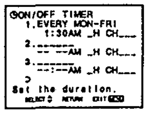




```
⊙ON/OFF TIMER
  1.EVERY MON-FRI
      1:00AM _H CH___
  2.-------
    --·--AM _H CH___
  3.-------
    --:--AM _H CH___
  ↩
Set the time.
```

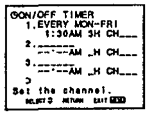
(4) Press + Δ or – ∇ to select the starting minute and press RETURN.





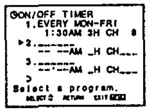
```
⊙ON/OFF TIMER
  1.EVERY MON-FRI
      1:30AM _H CH___
  2.-------
    -- --AM _H CH___
  3.-------
    --:--AM _H CH___
  ↩
Set the duration.
```

(5) Press + Δ or – ∇ to select the hour duration and press RETURN.



```
⊙ON/OFF TIMER
  1.EVERY MON-FRI
      1:30AM 3H CH___
  2.-------
    --·--AM _H CH___
  3.-------
    --·--AM _H CH___
  ↩
Set the channel.
```

(6) Press + Δ or – ∇ to select the channel and press RETURN.



```
⊙ON/OFF TIMER
  1.EVERY MON-FRI
      1:30AM 3H CH  8
 ▶2.-------
    -- --AM _H CH___
  3.-------
    --·--AM _H CH___
  ↩
Select a program.
```

The TIMER/STAND BY indicator on the projection TV lights.

5 To set other programs, press RETURN and repeat step 4.

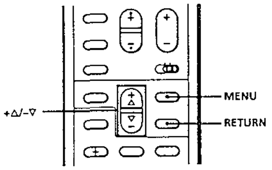
One minute before the projection TV switches to turn off, a message "TV WILL TURN OFF" is displayed on the screen.

To cancel an ON/OFF TIMER setting
Display the ON/OFF TIMER screen, select the setting you want to cancel with + Δ or – ∇, and select the blank (——) for the day of the week.

Note
- If you unplug the projection TV or a power interruption occurs, ON/OFF TIMER settings will be erased. Reset the current time, then set the timer.

Blocking a TV program from appearing on the screen (CHANNEL BLOCK)

This feature allows you to prevent children from watching unsuitable programs.
For example, set CHANNEL BLOCK for every Saturday at 4:30 p.m. for one hour, on channel 12.

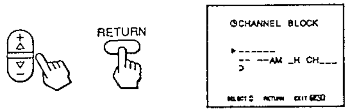


MENU
+△/−▽
RETURN

1 **Press MENU.**

2 **Press + △ or − ▽ to select TIME and press RETURN.**

3 **Press + △ or − ▽ to select CHANNEL BLOCK and press RETURN.**

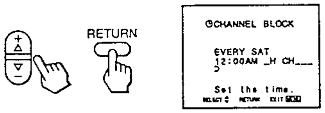


RETURN
CHANNEL BLOCK
▸------
-- --AM _H CH___
SELECT ⇕ RETURN EXIT MENU

4 **Enter a CHANNEL BLOCK setting.**

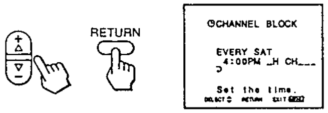
(1) Press RETURN to start setting.

(2) Press + △ or − ▽ to select the day of the week and press RETURN.
Each time you press + △ or − ▽, the day changes as shown below.
EVERY SUN-SAT→EVERY MON—FRI→SUNDAY→MONDAY→...→SATURDAY→"—— (blank)"→EVERY SUN→EVERY MON→ ...→EVERY SAT



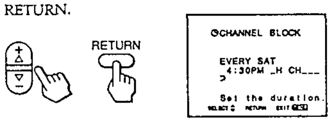
RETURN
CHANNEL BLOCK
EVERY SAT
12:00AM _H CH___
Set the time.
SELECT ⇕ RETURN EXIT MENU

(3) Press + △ or − ▽ to select the hour to start the channel block and press RETURN.



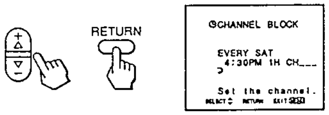
RETURN
CHANNEL BLOCK
EVERY SAT
4:00PM _H CH___
Set the time.
SELECT ⇕ RETURN EXIT MENU

(4) Press + △ or − ▽ to select the minute and press RETURN.



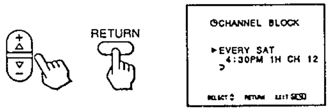
RETURN
CHANNEL BLOCK
EVERY SAT
4:30PM _H CH___
Set the duration.
SELECT ⇕ RETURN EXIT MENU

(5) Press + △ or − ▽ to select the hour duration you want to block and press RETURN.
Each time you press RETURN, the hour duration increases by one hour up to a maximum of six hours.



RETURN
CHANNEL BLOCK
EVERY SAT
4:30PM 1H CH___
Set the channel.
SELECT ⇕ RETURN EXIT MENU

(6) Press + △ or − ▽ to select the channel and press RETURN.



RETURN
CHANNEL BLOCK
▸EVERY SAT
4:30PM 1H CH 12
SELECT ⇕ RETURN EXIT MENU

At the preset time, a message "BLOCKED" is displayed in red on the screen if the blocked channel is selected. During the preset duration, the picture of the preset channel is blocked and the sound is muted.

To cancel a CHANNEL BLOCK setting

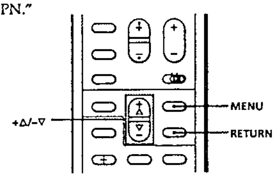
Display the CHANNEL BLOCK screen and select a blank (——-) for the day of the week.

Note

- If the CHANNEL BLOCK and ON/OFF TIMER settings are overlapped, the later time setting has priority over the other setting.

Customizing channel names (CH CAPTION)

You can caption each channel number using up to four letters or numbers to be displayed on the screen. This feature allows you to easily identify which channel you are watching. For example, you can name channel 20 "ESPN."

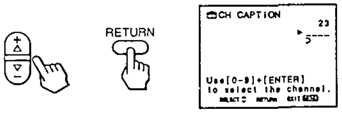


MENU
+△/−▽
RETURN

1 **Press MENU.**

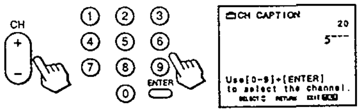
2 **Press + △ or − ▽ to select SET UP and press RETURN.**

3 **Press + △ or − ▽ to select CH CAPTION and press RETURN.**



RETURN
CH CAPTION
20
▸5---
Use[0-9]+[ENTER]
to select the channel.
SELECT ⇕ RETURN EXIT MENU

4 **Press CH +/– or press 0–9 buttons and ENTER to enter the channel number that you want to caption, and press RETURN.**



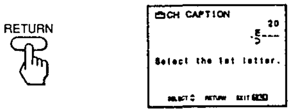
CH
1 2 3
4 5 6
7 8 9
0
ENTER
CH CAPTION
20
5---
Use[0-9]+[ENTER]
to select the channel.
SELECT ⇕ RETURN EXIT MENU

5 **Enter the letters or numbers (up to four) to caption the channel:**

(1) Press + △ or − ▽ to select the first letter (number).
Each time you press + △ or − ▽, the letter (number) changes as shown below.

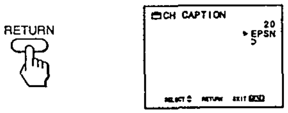
0→1→...→9→A→B→...→Z→&→/→_(blank space)

(2) Press RETURN.



RETURN
CH CAPTION
20
E---
Select the 1st letter.
SELECT ⇕ RETURN EXIT MENU

(3) Repeat steps (1) and (2) to select the remaining letters (numbers) and press RETURN.
For the caption space you want to leave blank, select "_ (blank)."



RETURN
CH CAPTION
20
▸EPSN
SELECT ⇕ RETURN EXIT MENU

6 **Repeat steps 4 and 5 to caption other channels.**

To erase a caption

Select the channel number with the caption you want to erase in the CH CAPTION screen, select "_ (blank)" for the caption, and press RETURN.

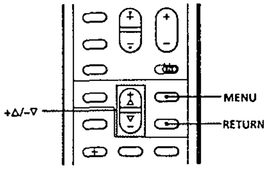
Notes

- You can set up to 32 channel captions. If 32 captions have been set, "The memory is full, sorry" appears on the screen.
- If the CH CAPTION menu appears in black, the projection TV is set to a video input, and you cannot select CH CAPTION. Press TV so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

Setting video labels

(VIDEO LABEL)

This feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 IN as VHS.

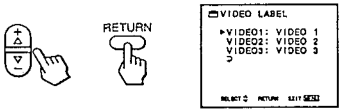


+Δ/–∇
MENU
RETURN

1 **Press MENU.**

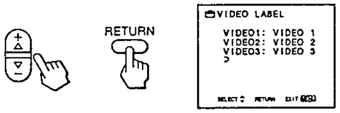
2 **Press + Δ or – ∇ to select SET UP and press RETURN.**

3 **Press + Δ or – ∇ to select VIDEO LABEL and press RETURN.**



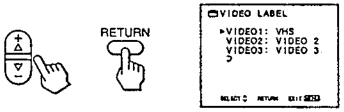
RETURN
VIDEO LABEL
▸VIDEO1: VIDEO 1
VIDEO2: VIDEO 2
VIDEO3: VIDEO 3

4 **Press + Δ or – ∇ to select the input mode you want to label and press RETURN.**



RETURN
VIDEO LABEL
VIDEO1: VIDEO 1
VIDEO2: VIDEO 2
VIDEO3: VIDEO 3

5 **Press + Δ or – ∇ to select the label and press RETURN.**



RETURN
VIDEO LABEL
▸VIDEO1: VHS
VIDEO2: VIDEO 2
VIDEO3: VIDEO 3

Each time you press + Δ or – ∇, the label changes as shown below.

VIDEO 1
VIDEO 1→BETA→8mm→VHS→LD→S-VIDEO

VIDEO 2
VIDEO 2→BETA→8mm→VHS→LD

VIDEO 3
VIDEO 3→BETA→8mm→VHS→LD

6 **Repeat steps 4 and 5 to label other input modes.**

Note

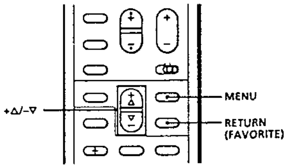
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

Selecting your favorite channels

(FAVORITE CHANNEL)

This feature allows you to select the channels (up to seven channels) you use frequently by pressing RETURN (FAVORITE).

Setting the favorite channels

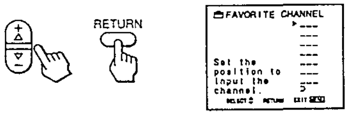


+Δ/–∇
MENU
RETURN
(FAVORITE)

1 **Press MENU.**

2 **Press + Δ or – ∇ to select SET UP and press RETURN.**

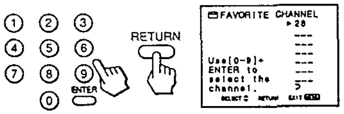
3 **Press + Δ or – ∇ to select FAVORITE CHANNEL and press RETURN.**



RETURN
FAVORITE CHANNEL
Set the position to input the channel.

4 **Press + Δ or – ∇ to select the position (up to seven) and press RETURN.**

5 **Press 0 – 9 and ENTER to set your favorite channel number and press RETURN.**



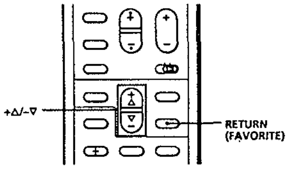
1 2 3
4 5 6
7 8 9
0
ENTER
RETURN
FAVORITE CHANNEL
▸28
Use[0-9]+ ENTER to select the channel.

6 **Repeat steps 4 and 5 to set other favorite channels.**

To erase a favorite channel setting

Press + Δ or – ∇ to select the channel number you want to erase and press RETURN. Then press the 0 button and ENTER.

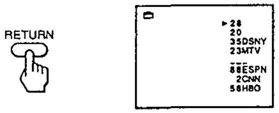
Selecting a favorite channel



+Δ/–∇
RETURN
(FAVORITE)

1 **Press RETURN.**

The FAVORITE CHANNEL list appears showing the channel numbers you set with the captions (if set.)



RETURN
▸28
20
35DSNY
23MTV

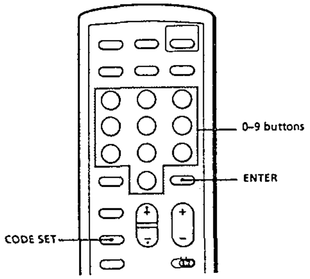
88ESPN
2CNN
58HBO

2 **Press + Δ or – ∇ to select the channel you want to watch and press RETURN.**

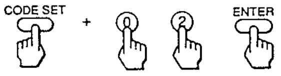
Operating video equipment

You can operate a piece of video equipment that has an infrared remote sensor with the supplied remote commander. Before operating, set the manufacturer's code number.

Setting the manufacturer's code



While pressing CODE SET, press 0 – 9 to enter the manufacturer's code number (see the chart in the right column) and press ENTER. For example, to operate a Sony 8 mm VCR, press 0, 2 and ENTER.



Manufacturer code numbers

Manufacturer	Code number
SONY	01, 02, 03, 04
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

Notes

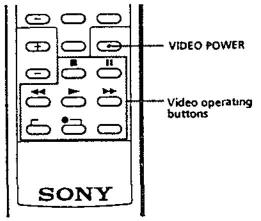
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- In some rare cases, you may not be able to operate your non-Sony video equipment with this remote commander. This is because your equipment may use a code that is not provided with this remote commander. In this case, please use the equipment's own remote control unit.
- The code numbers for Sony equipment are assigned at the factory as follows:

Beta, ED Beta VCRs	01
8 mm VCR	02
VHS VCR	03 (preset code for this remote commander)
MDP	04

Caution

When you remove a battery from the remote commander, the code may revert to 03. Reset the codes each time you replace the battery, if necessary.

Operating video equipment



Use the video operating buttons on the remote commander to operate the video equipment.

Operating a VCR	Buttons on the remote commander
To turn on or off	Press VIDEO POWER
To change channels	Press CH +/–
To record	Press ● and REC simultaneously
To play	Press ►
To stop	Press ■
To fast forward	Press ►►
To rewind the tape	Press ◄◄
To pause	Press ❚❚
To search the picture forward and backward	Press ►► or ◄◄ during playback

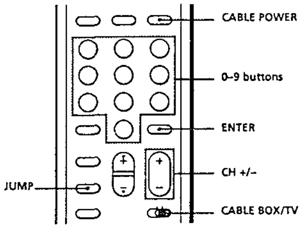
Operating a laser-disc player	Buttons on the remote commander
To play	Press ►
To stop	Press ■
To pause	Press ❚❚ To resume normal playback, press again.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback To resume normal playback, release the button.
To search the chapter forward and backward	Press CH +/–

Note

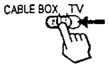
- If the video equipment does not have a certain function, the corresponding button on this remote commander will not operate.

Operating a cable box

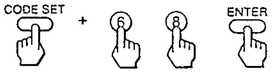
You can operate a connected cable box with the supplied remote commander. Before operating, set the manufacturer's code number.



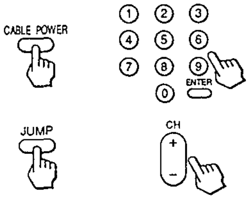
1 **Set the CABLE BOX/TV selector to CABLE BOX.**



2 **While pressing CODE SET, press 0 – 9 to enter the manufacturer's code number (see the chart below) and press ENTER. For example, to operate a Zenith cable box, press 6 and 8 and press ENTER.**



3 **Use CABLE POWER and the TV control buttons (0 – 9, ENTER, JUMP and CH +/–) to operate the cable box.**



To operate the TV

Set the CABLE BOX/TV selector to TV. Then use the TV control buttons to control the TV.

For more details on operating the cable box

Refer to the operating instructions that come with the cable box.

Manufacturers and code numbers (cable box)

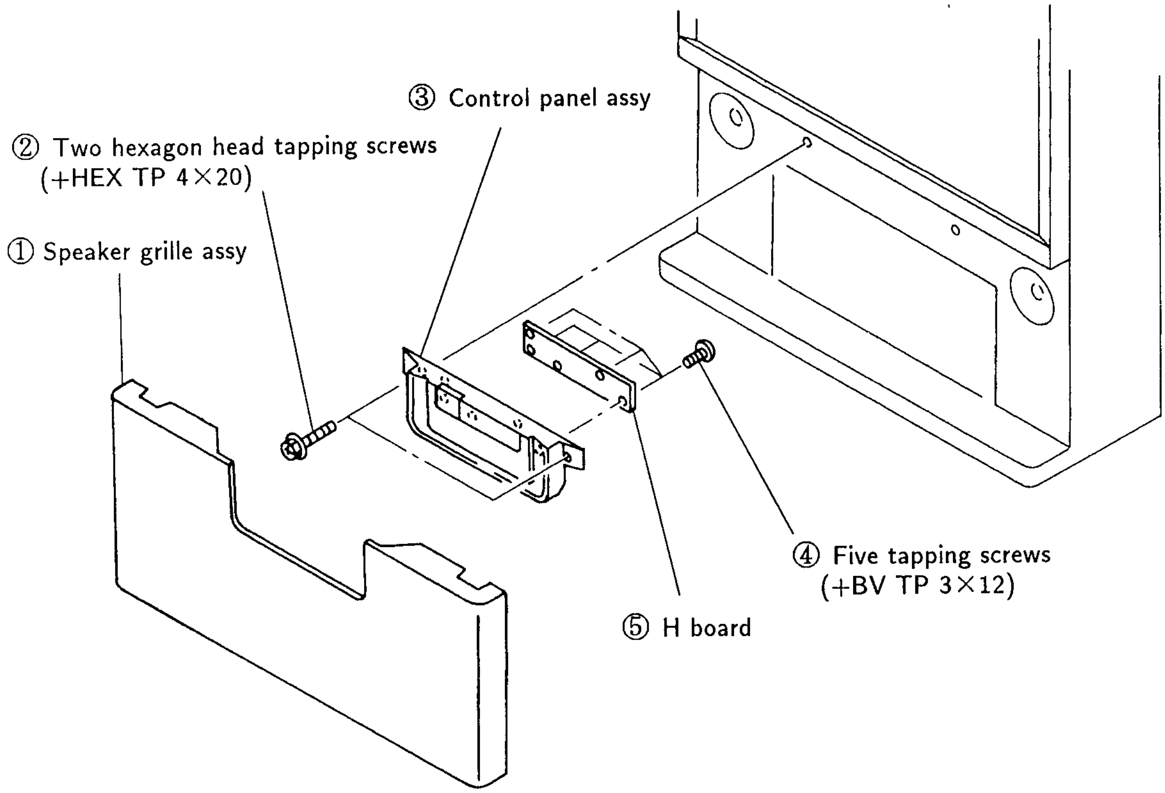
Manufacturer	Code number
JERROLD	60, 61, 62, 63, 64, 65, 73
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

Notes

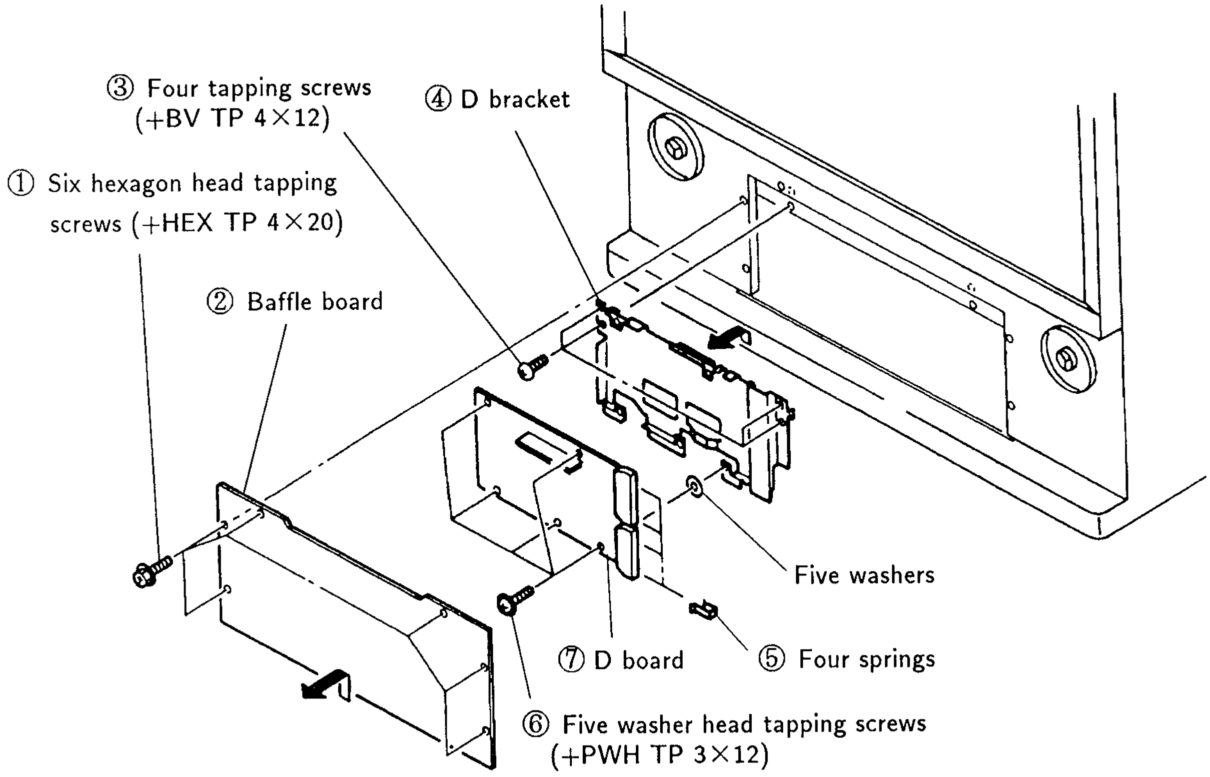
- If more than one code number is listed, try entering them one by one until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this remote commander and you may not be able to operate your cable box with the supplied remote commander. In this case, use the equipment's own remote control unit.
- When you remove a battery from the remote commander, the code may be erased. Reset the code each time you replace the battery, if necessary.

SECTION 2
DISASSEMBLY

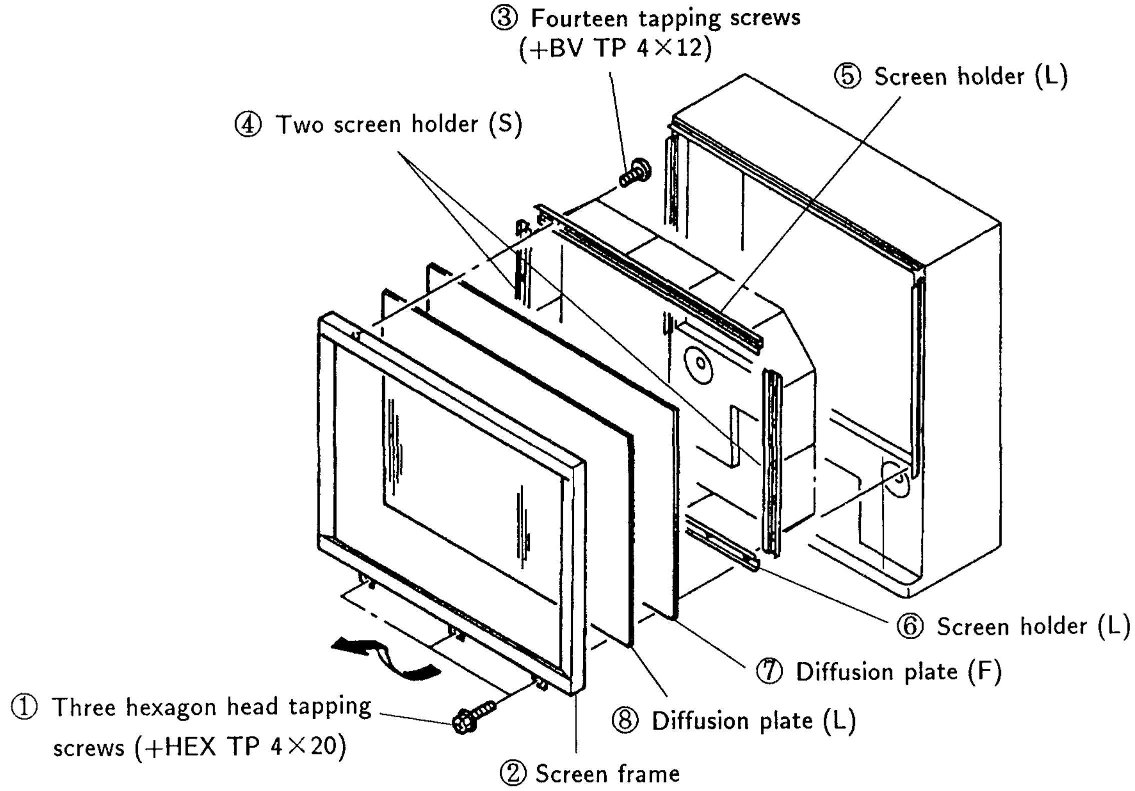
2-1. H BOARD REMOVAL


③ Control panel assy
② Two hexagon head tapping screws
(+HEX TP 4×20)
① Speaker grille assy
④ Five tapping screws
(+BV TP 3×12)
⑤ H board

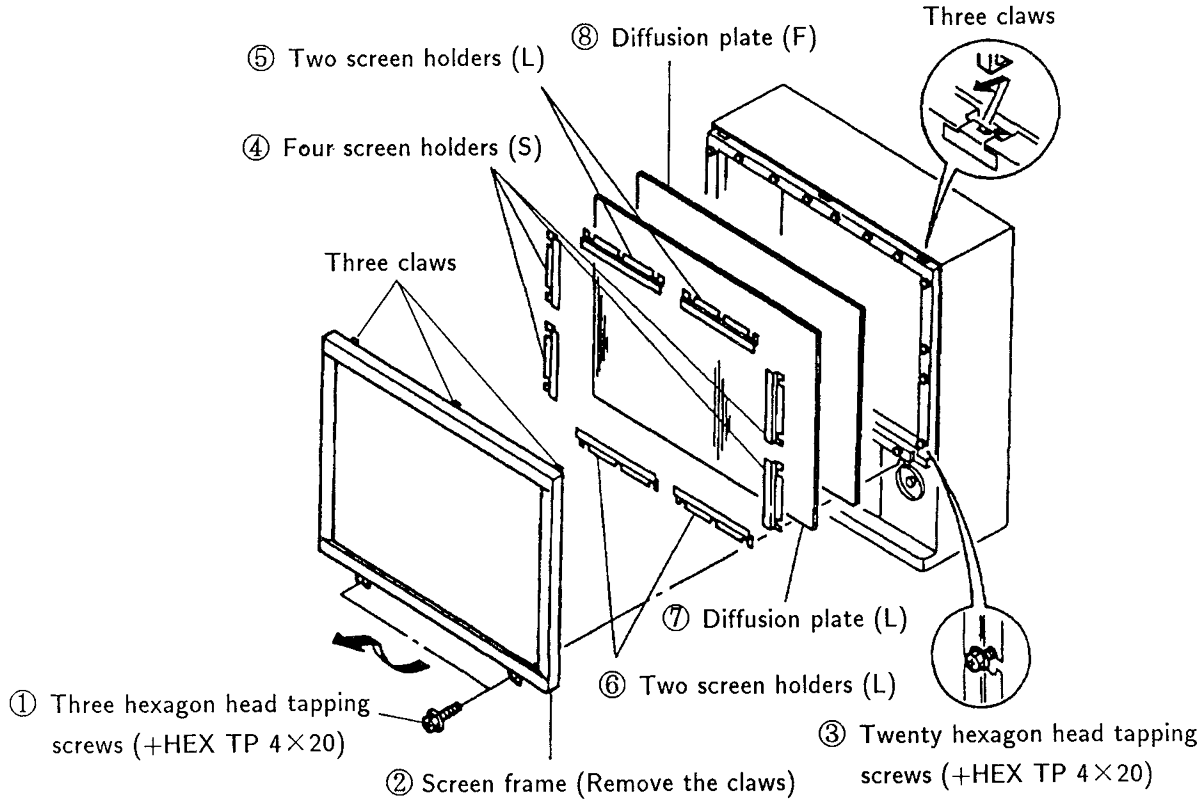
2-2. D BOARD REMOVAL


③ Four tapping screws
(+BV TP 4×12)
④ D bracket
① Six hexagon head tapping
screws (+HEX TP 4×20)
② Baffle board
Five washers
⑦ D board
⑤ Four springs
⑥ Five washer head tapping screws
(+PWH TP 3×12)

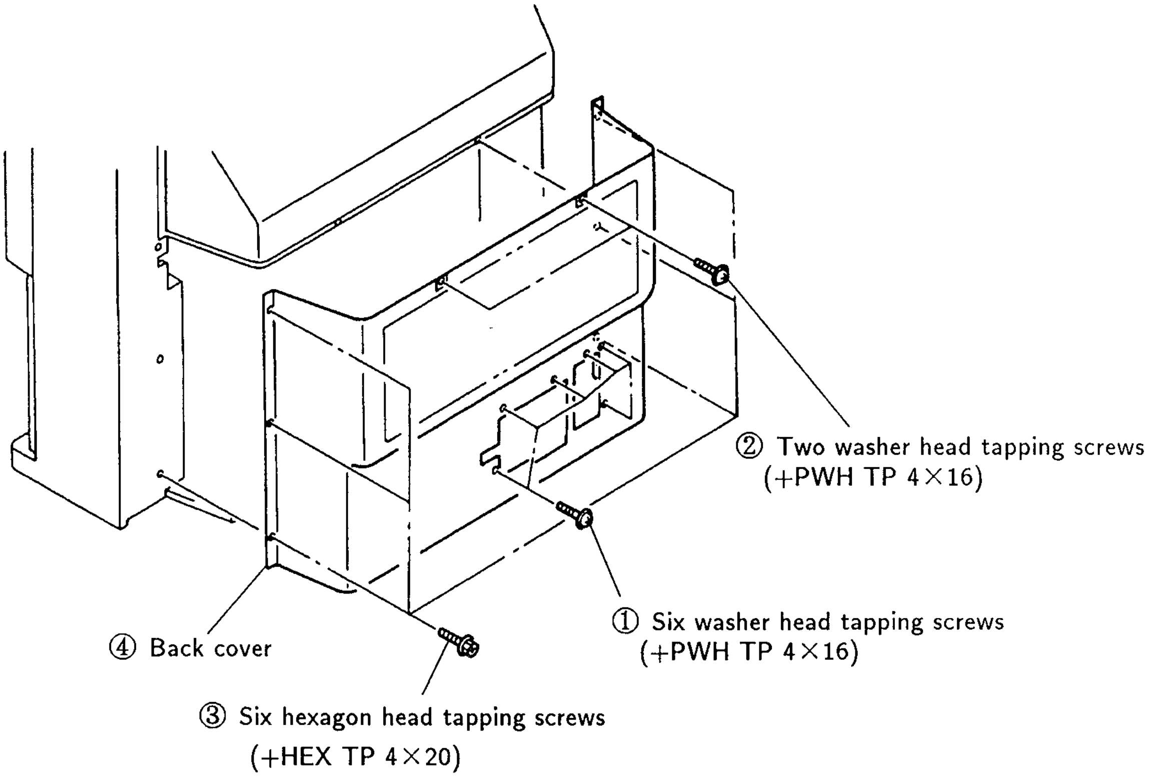
2-3-1. DIFFUSION PLATE REMOVAL (KP-46S55 only)


③ Fourteen tapping screws (+BV TP 4×12)
⑤ Screen holder (L)
④ Two screen holder (S)
⑥ Screen holder (L)
⑦ Diffusion plate (F)
① Three hexagon head tapping screws (+HEX TP 4×20)
⑧ Diffusion plate (L)
② Screen frame

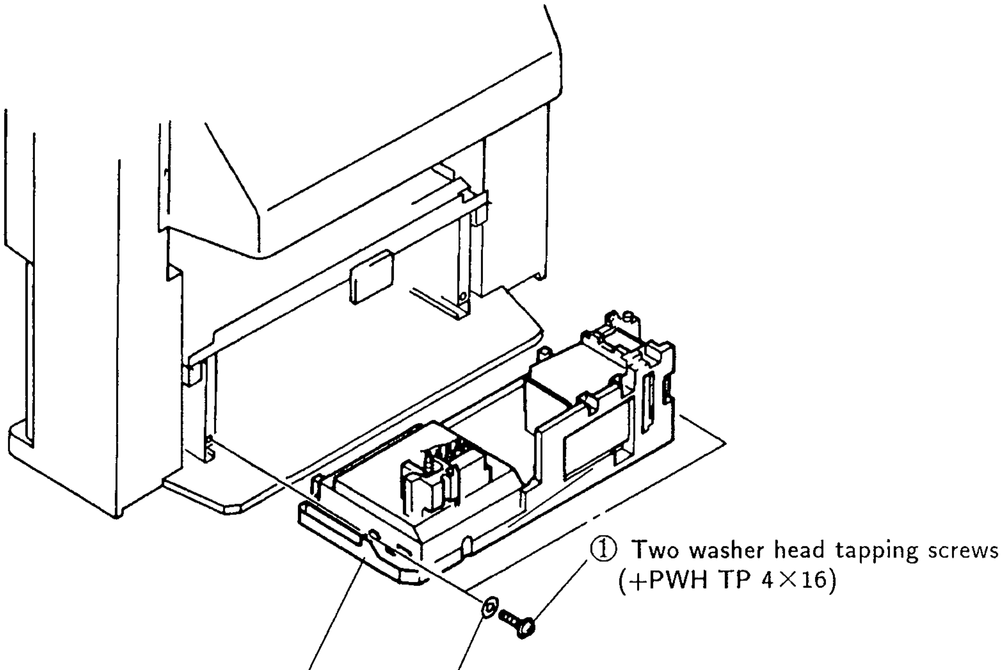
2-3-2. DIFFUSION PLATE REMOVAL (KP-53S55 only)


Three claws
⑧ Diffusion plate (F)
⑤ Two screen holders (L)
④ Four screen holders (S)
Three claws
⑦ Diffusion plate (L)
⑥ Two screen holders (L)
① Three hexagon head tapping screws (+HEX TP 4×20)
③ Twenty hexagon head tapping screws (+HEX TP 4×20)
② Screen frame (Remove the claws)

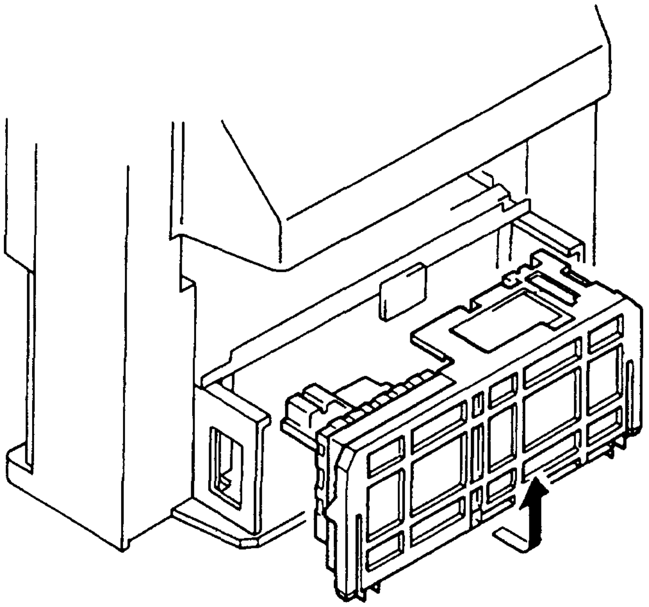
2-4. BACK COVER REMOVAL


② Two washer head tapping screws
(+PWH TP 4×16)
① Six washer head tapping screws
(+PWH TP 4×16)
④ Back cover
③ Six hexagon head tapping screws
(+HEX TP 4×20)

2-5. MAIN CHASSIS ASSY REMOVAL


① Two washer head tapping screws
(+PWH TP 4×16)
Wave washer
② Main chassis assy

2-6. SERVICE POSITION



NOTES INSERTED IN SERVICE POSITION SECTION

Service Position Procedure

(1) Remove the path locks where the harness comes into.
  (MAIN bracket, G shield)

(2) Remove the following connectors before removing the main bracket
  * HV grounding lead, G shield grounding lead, uT35 grounding lead (uT board), V-2 connector (V board).

(3) Remove the main bracket. (Take care as the connector leads linking to the C and Z boards are considerably short.)
  (MAIN bracket, G shield)

(4) When pulling out the main bracket with power ON, be sure to connect the connectors removed
  * HV grounding lead, G shield grounding lead, uT35 grounding lead (uT board).

In case that grounding lead (Black) of HV Block is not connected with chassis grounding, it causes arcing of CRT and it is dangerous.

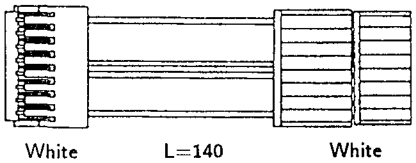
Be sure to connect grounding lead of HV Block with chassis grounding.

CONNECTOR CABLES

※ **In order to put the set in the service position, use the extension connector cables below.**

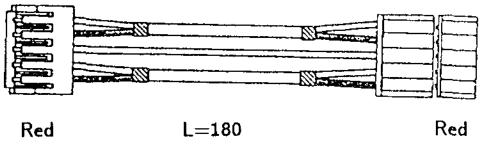
Parts No.	Connection
1-941-897-38	CB-4 (G-4)

1 : Brown
2 : —
3 : —
4 : Yellow
5 : Green
6 : —
7 : —
8 : Gray


White
L=140
White

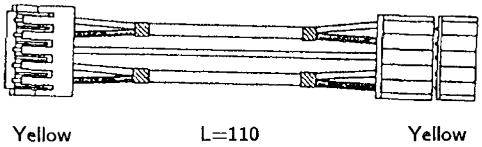
Parts No.	Connection
1-941-897-43	CR-15 (A-15)

1 : White/Gray
2 : Gray/Shield
3 : Orange
4 : Red/Gray
5 : Gray/Shield


Red
L=180
Red

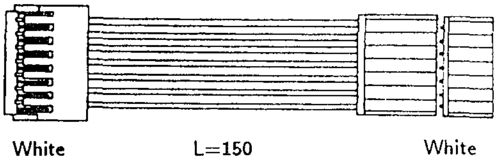
Parts No.	Connection
1-941-897-39	CG-16 (A-16)

1 : White/Gray
2 : Gray/Shield
3 : Orange
4 : Red/Gray
5 : Gray/Shield


Yellow
L=110
Yellow

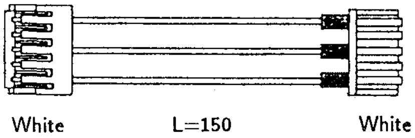
Parts No.	Connection
1-941-897-44	ZR-1 (D-1)

1 : Brown
2 : Red
3 : Orange
4 : Yellow
5 : Green
6 : Blue
7 : Violet


White
L=150
White

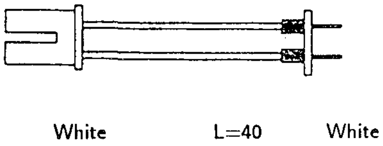
Parts No	Connection
1-941-897-40	ZG-19 (A-19)

1 : Green
2 : —
3 : Black
4 : —
5 : Brown


White
L=150
White

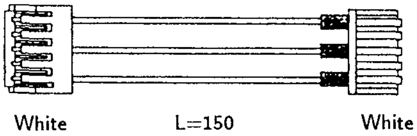
Parts No	Connection
1-941-897-45	A-21 (CRT BRACKET)

1 : Black
2 : Black


White
L=40
White

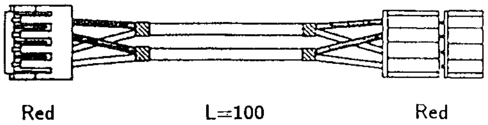
Parts No	Connection
1-941-897-41	ZR-18 (A-18)

1 : Red
2 : —
3 : Black
4 : —
5 : Brown


White
L=150
White

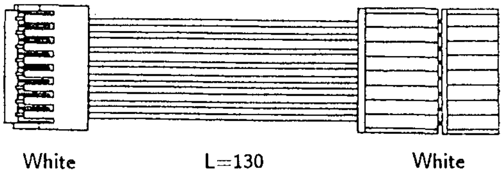
Parts No.	Connection
1-941-897-47	A-3 (G-3)

1 : Red
2 : White
3 : Gray/Shield
4 : Black

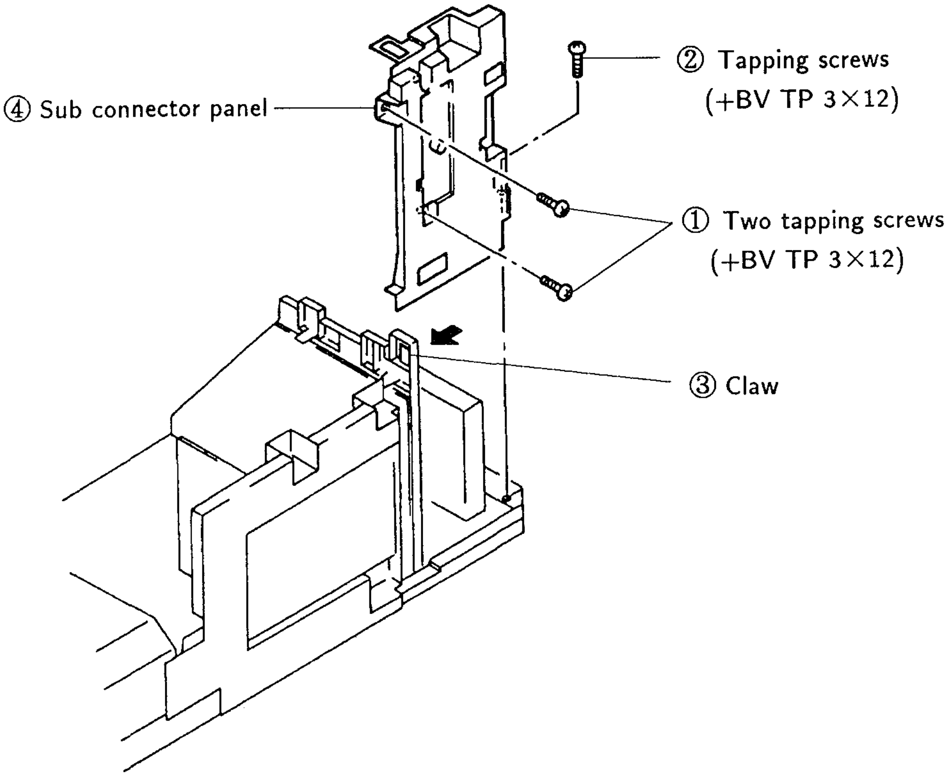

Red
L=100
Red

Parts No	Connection
1-941-897-42	ZG-2 (D-2)

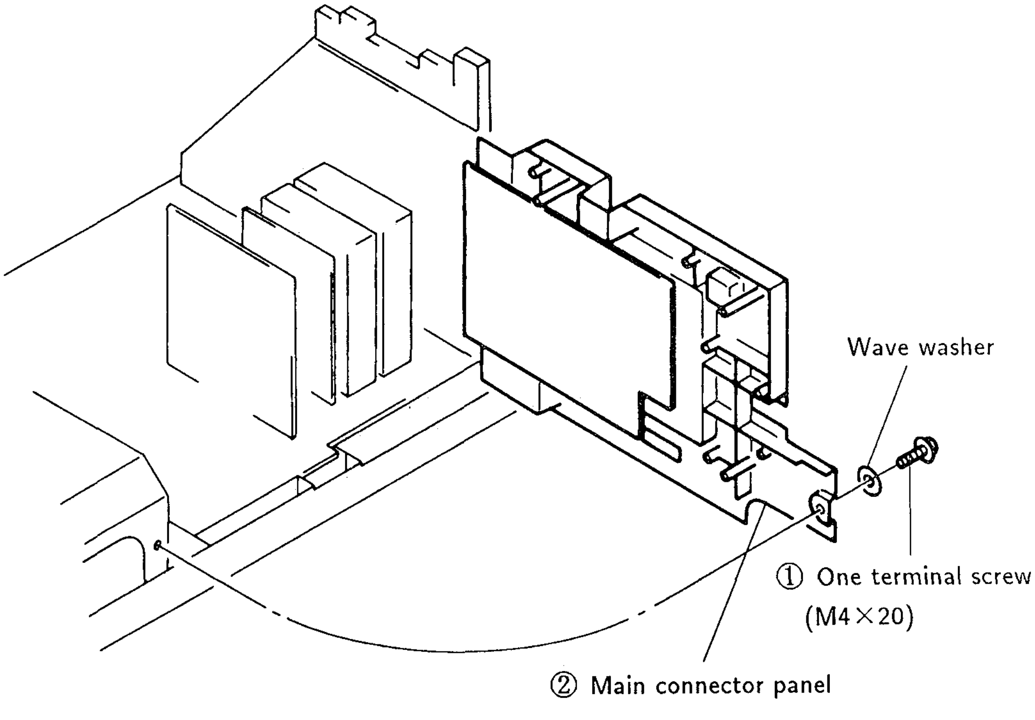
1 : —
2 : Red
3 : Orange
4 : Yellow
5 : Green
6 : Blue
7 : Violet
8 : Gray


White
L=130
White

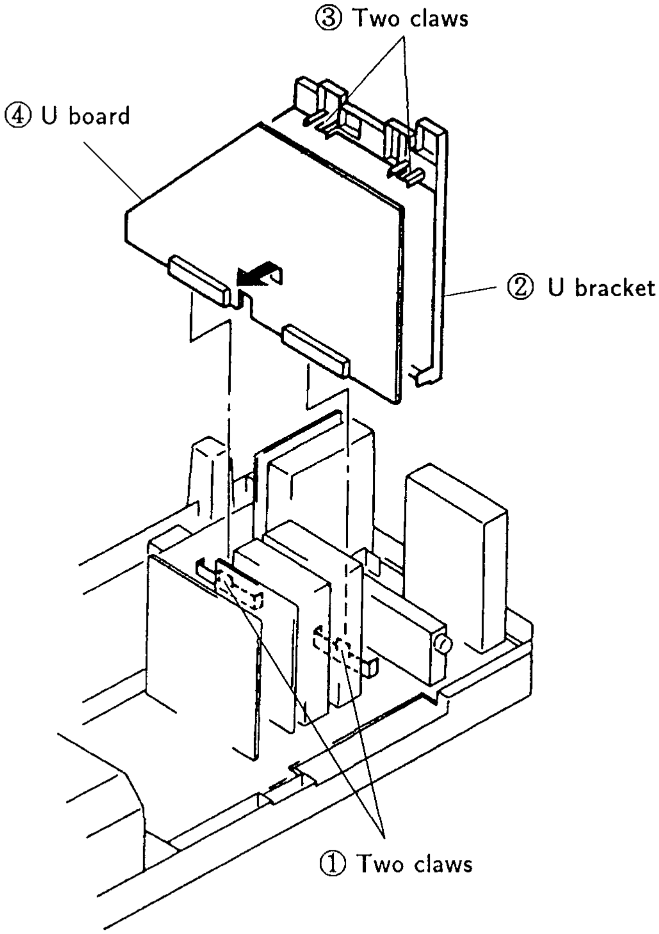
2-7. SUB CONNECTOR PANEL REMOVAL


② Tapping screws
(+BV TP 3×12)
④ Sub connector panel
① Two tapping screws
(+BV TP 3×12)
③ Claw

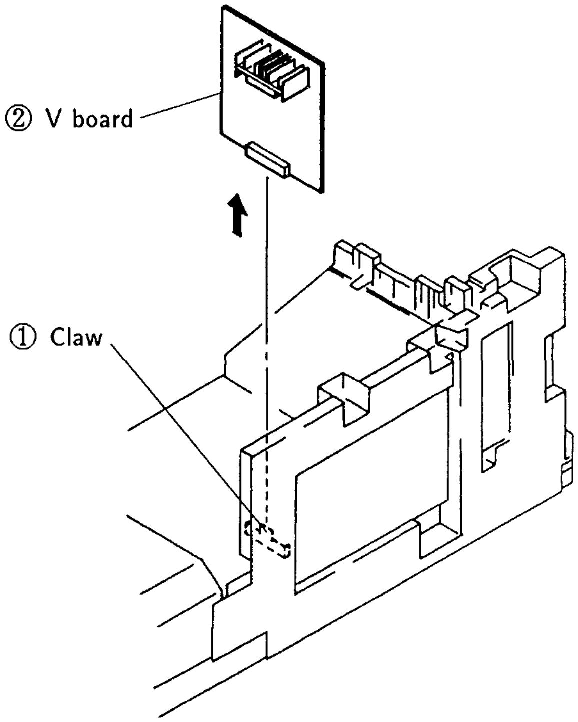
2-8. MAIN CONNECTOR PANEL REMOVAL


Wave washer
① One terminal screw
(M4×20)
② Main connector panel

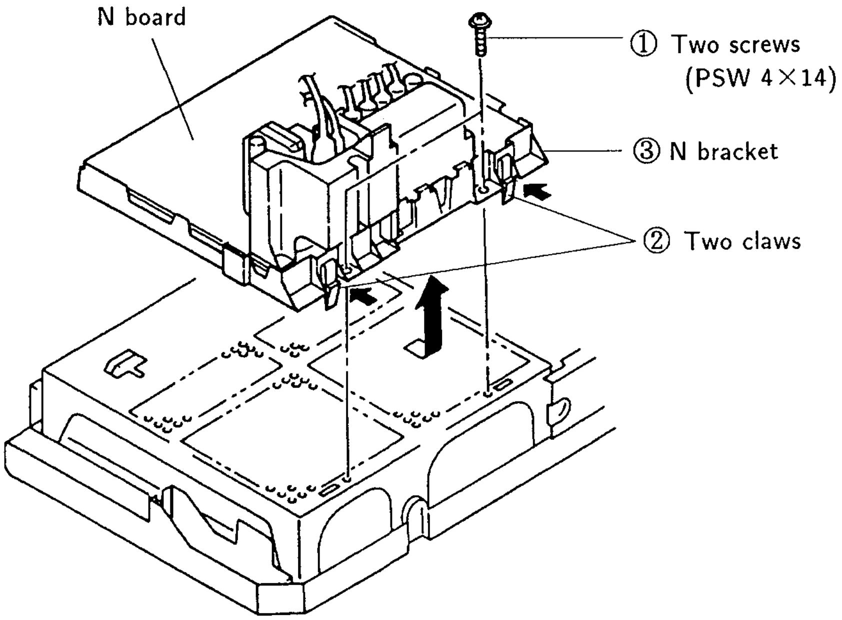
2-9. U BOARD REMOVAL


③ Two claws
④ U board
② U bracket
① Two claws

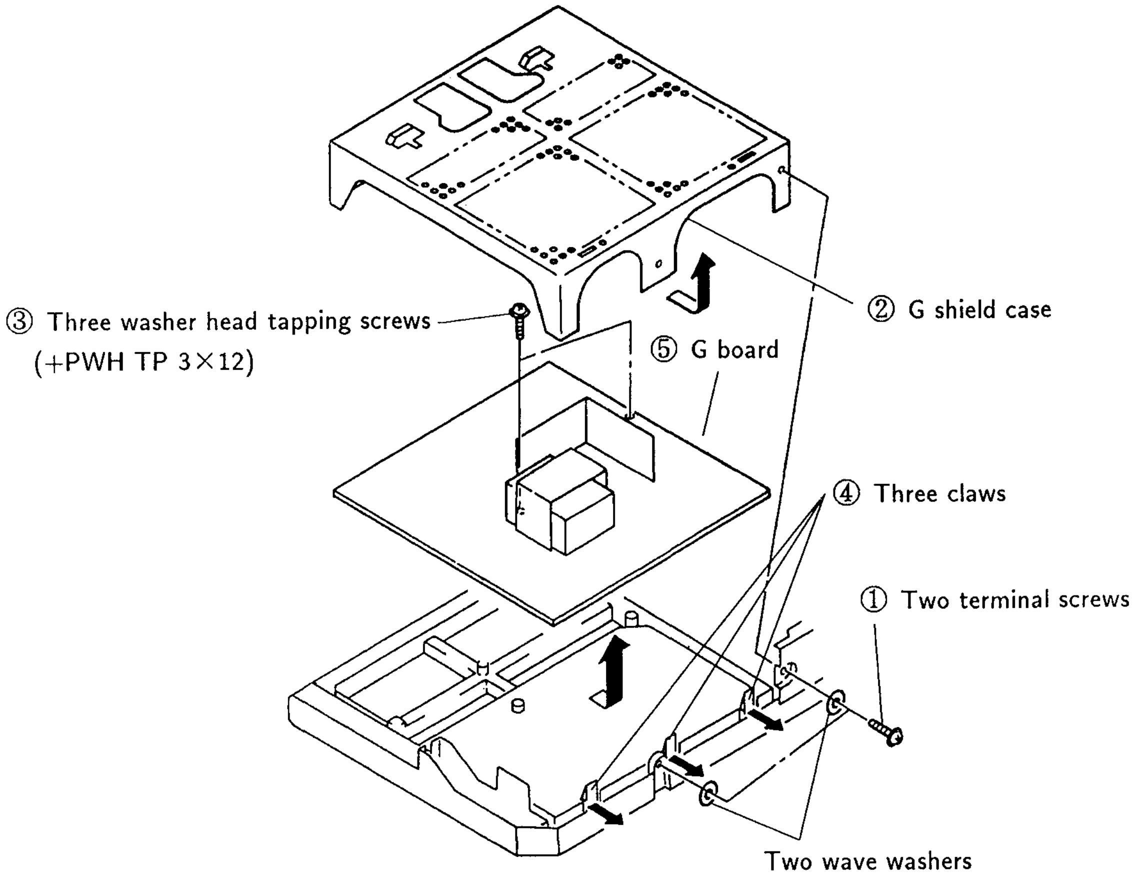
2-10. V BOARD REMOVAL


② V board
① Claw

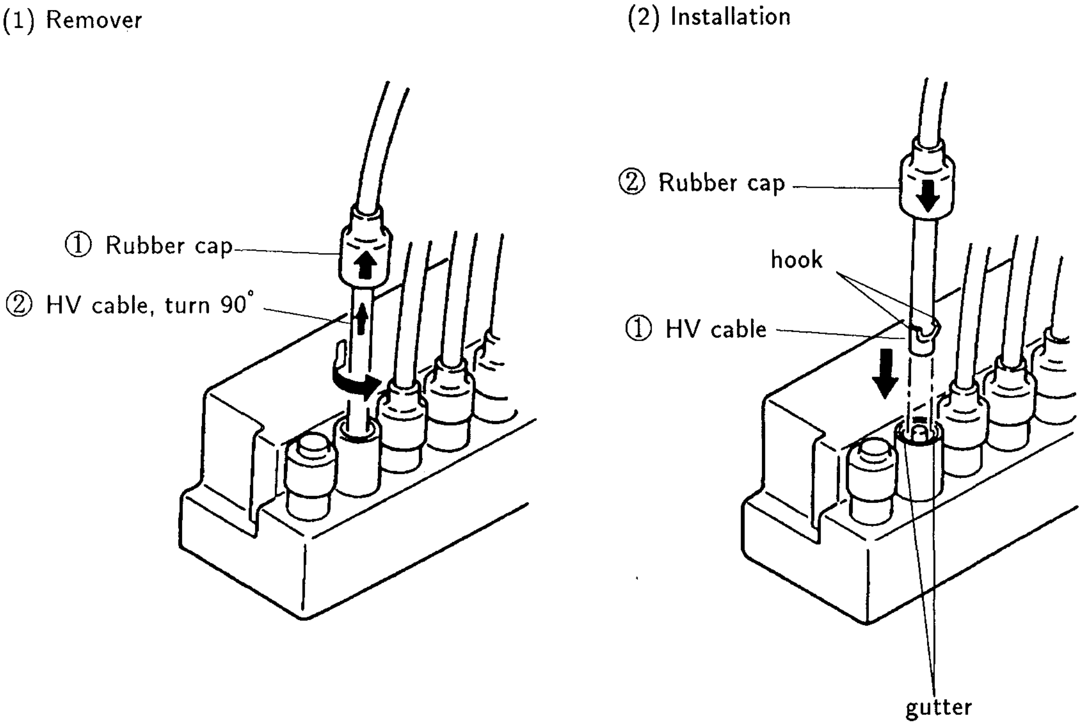
2-11. N BRACKET REMOVAL


N board
① Two screws
(PSW 4×14)
③ N bracket
② Two claws

2-12. G BOARD REMOVAL


③ Three washer head tapping screws
(+PWH TP 3×12)
② G shield case
⑤ G board
④ Three claws
① Two terminal screws
Two wave washers

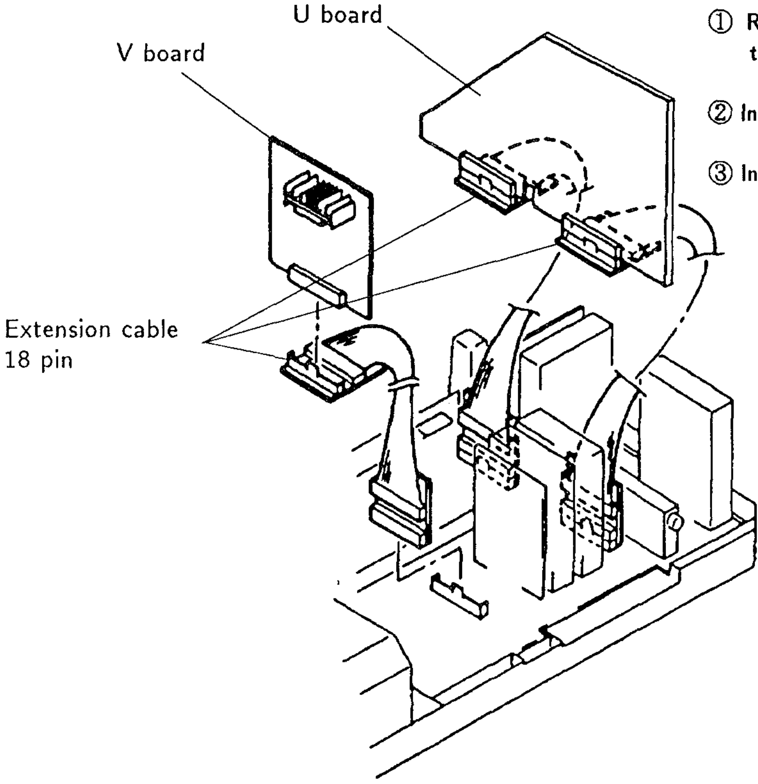
2-13. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL


(1) Remover

(2) Installation

① Rubber cap
② HV cable, turn 90°
② Rubber cap
hook
① HV cable
gutter

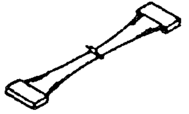
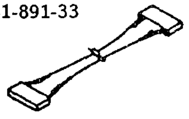
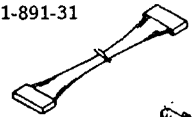
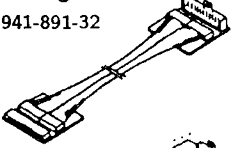
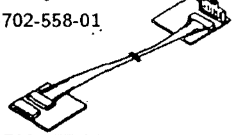
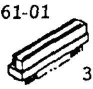
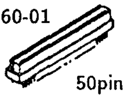
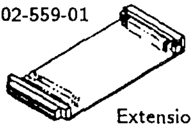
2-14. EXTENSION CABLE AND EXTENSION BOARD

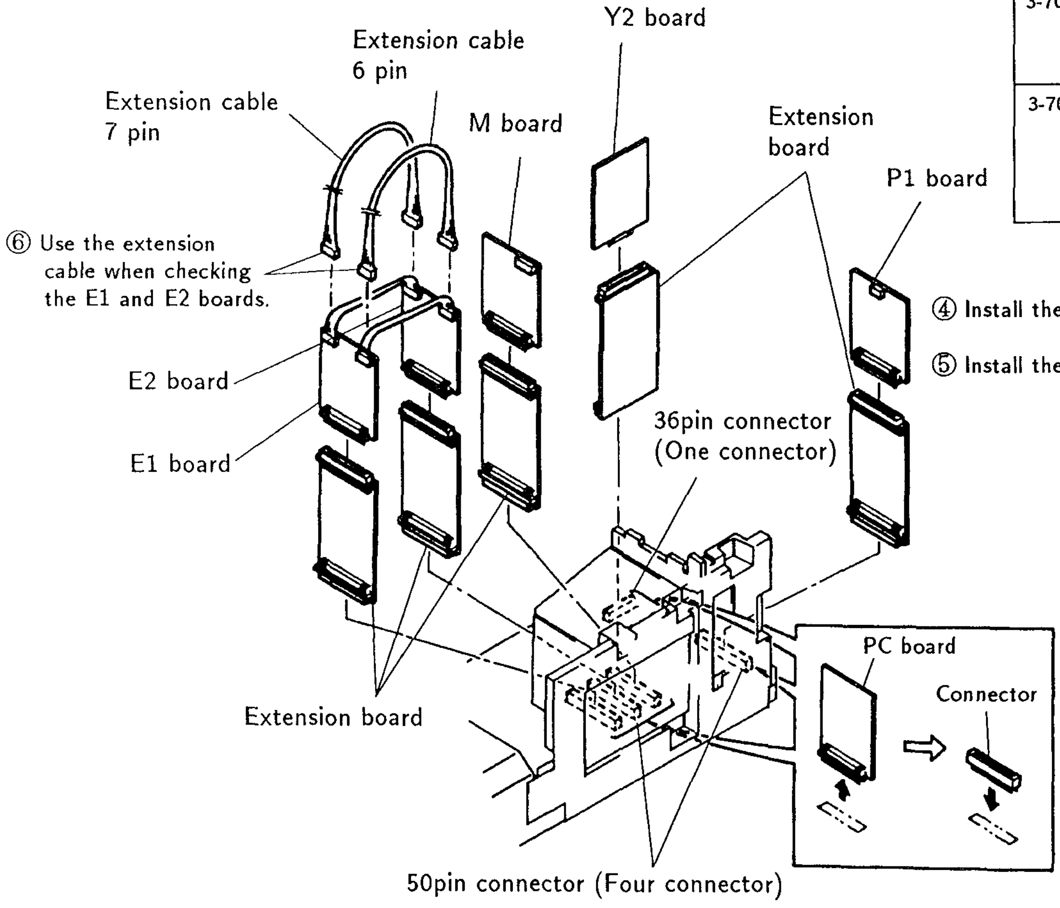

U board
V board
Extension cable
18 pin

① Remove the board from the connector.

② Install the extension cable.

③ Install the board

Exterior	
Extension cable	
	1-941-891-33
	1-941-891-31
	1-941-891-32
	3-702-558-01
	3-702-557-01
3-702-561-01	 36pin connector
3-702-560-01	 50pin connector
3-702-559-01	 Extension board


Extension cable
6 pin
Y2 board
Extension cable
7 pin
M board
Extension board
P1 board
E2 board
E1 board
36pin connector
(One connector)
Extension board
PC board
Connector
50pin connector (Four connector)

⑥ Use the extension cable when checking the E1 and E2 boards.

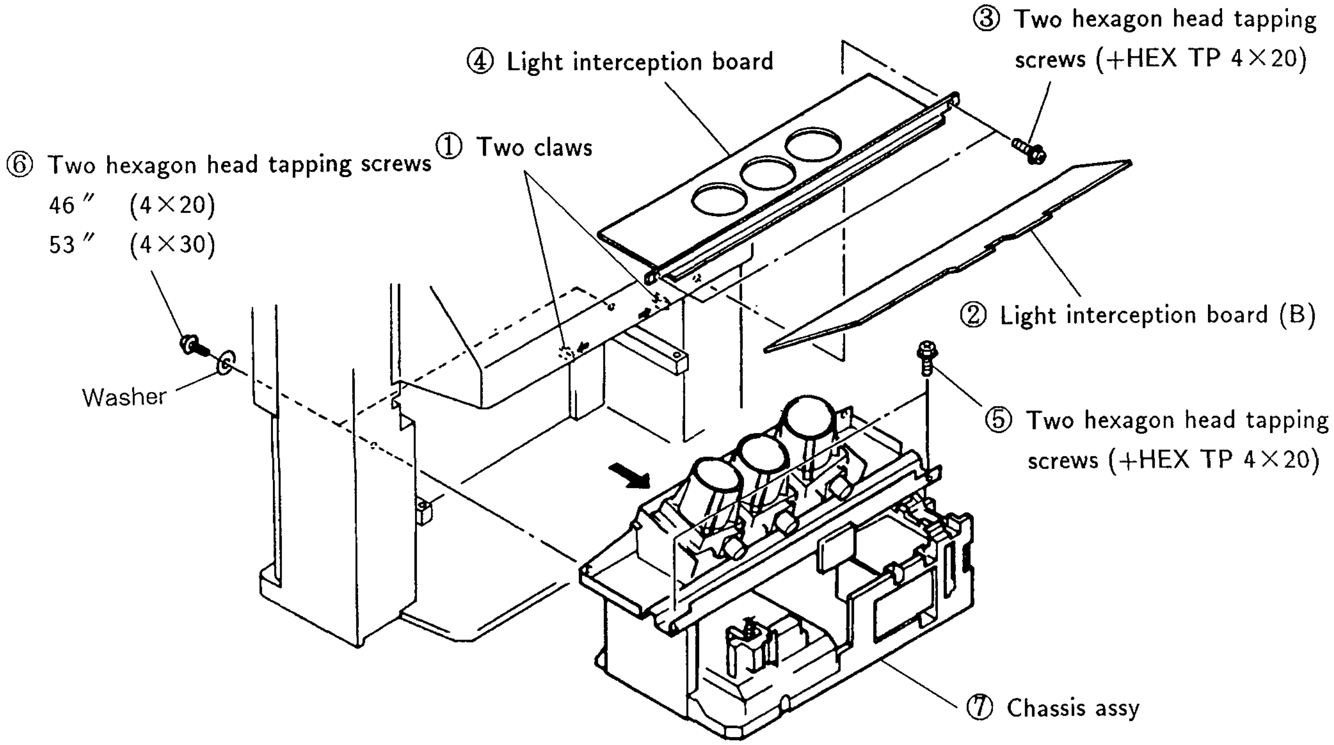
④ Install the PC board removed.

⑤ Install the extension board.

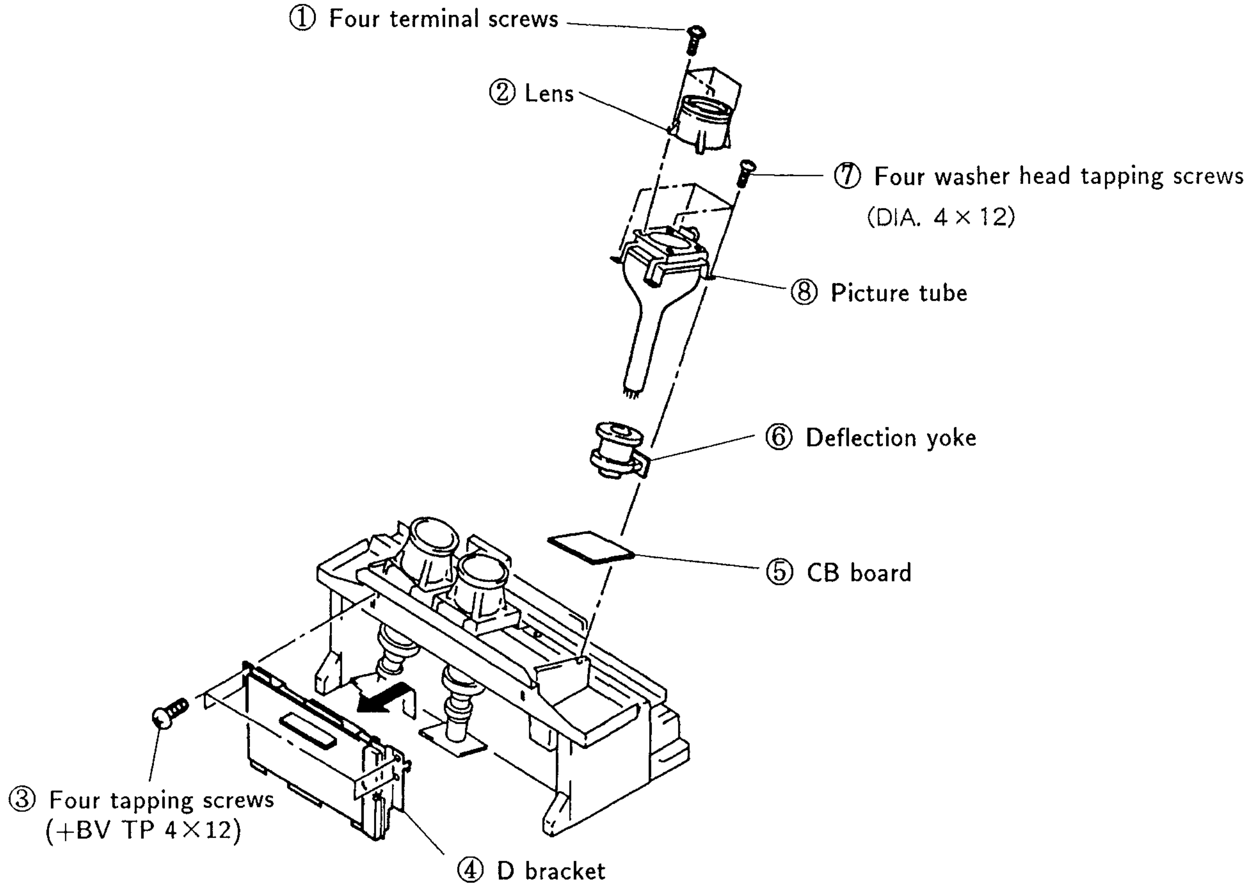
(1) De-solder the PC board and remove it.

(2) Solder the connector

2-15. CHASSIS ASSY REMOVAL


③ Two hexagon head tapping screws (+HEX TP 4×20)
④ Light interception board
① Two claws
⑥ Two hexagon head tapping screws
46″ (4×20)
53″ (4×30)
② Light interception board (B)
Washer
⑤ Two hexagon head tapping screws (+HEX TP 4×20)
⑦ Chassis assy

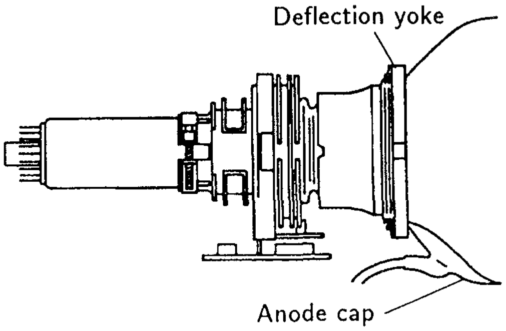
2-16. PICTURE TUBE REMOVAL


① Four terminal screws
② Lens
⑦ Four washer head tapping screws (DIA. 4 × 12)
⑧ Picture tube
⑥ Deflection yoke
⑤ CB board
③ Four tapping screws (+BV TP 4×12)
④ D bracket

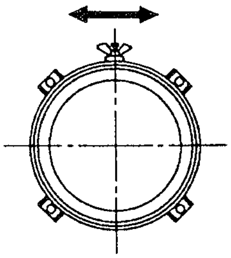
SECTION 3
SET-UP ADJUSTMENTS

3-1. FOCUS LENS ADJUSTMENTS

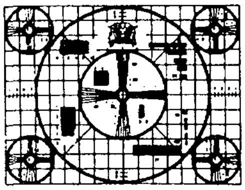
1. Set the D-board registration variable resistors (VR) to mechanical center.
2. Set the centering magnets (for red, green, and blue) to 0 as shown in the figure.

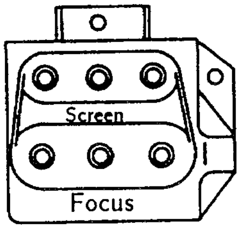


3. Input monoscope signal. Set 50% BRIGHTNESS and minimum PICTURE. Make rough adjustment so that 10IRE of the monoscope signal becomes faintly luminous using the screen VRs.
4. Set PICTURE and BRIGHTNESS maximum. Press the commander menu button. Select CONVERGENCE to display test signal.
5. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
   Similarly, select B OFF to cut off blue output.
6. Turn the green lens to eliminate flare of the test signal.

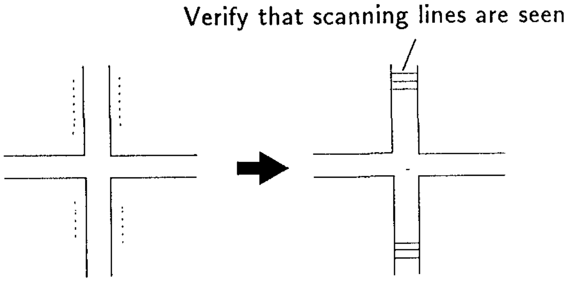


(Lens)

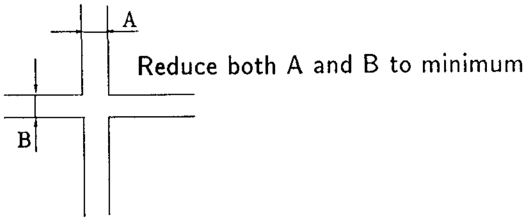




(Focus block)



7. Turn the green focus VR in the focus block to adjust green focus to reduce both A and B of the test signal to minimum.



8. Repeat avobe 6 and 7. Couple of times to improve tracking and obtain an optimum focus. Then tighten the green lens screw.
9. Adjust the red and blue focuses similarly.

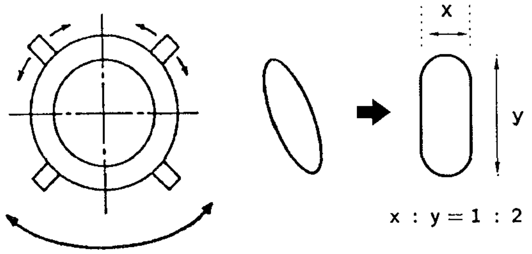
3-2. DEFLECTION YOKE POSITION ADJUSTMENTS

1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
   Similarly, select B OFF to cut off blue output.
3. Loosen the deflection yoke (DY) fitting screws. Tilt the DY to obtain the best horizontal and vertical monoscope patterns.
4. After adjustment, press the DY onto the cathode ray tube (CRT) funnel and tighten the screws.
5. Also adjust DY positions for red and blue outputs in the same way.

3-3. 4-POLE MAGNET ADJUSTMENT (BLUE)

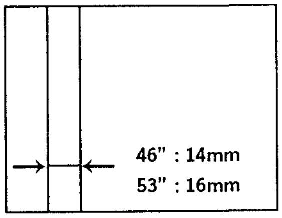
1. Input dot signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
   Similarly, select G OFF to cut off green output.
3. Set PICTURE to maximum. Turn the blue focus variable resistor (VR) in the focus block clockwise from the just focus until the dot diameter becomes as shown below.
   46″ : 17 ~ 22 mm
   53″ : 19 ~ 26 mm
4. Adjust the 4-pole magnet to make the dot as shown below.
5. Turn the blue focus variable resistor to the just focus.

＊ Use the vertical center and left end dot



3-4. DE-FOCUS ADJUSTMENT (BLUE)

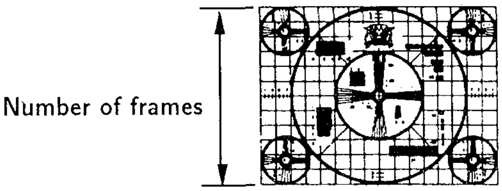
1. Input cross hatch signal.
2. Turn the blue focus variable resistor (VR) in the focus block counter clock wise so that thewidth of the left end vertical line becomes as shown below.



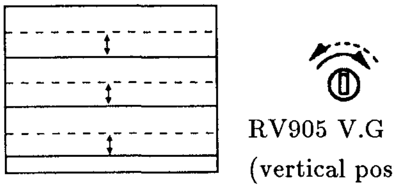
without flare

3-5. GREEN PICTURE ADJUSTMENTS

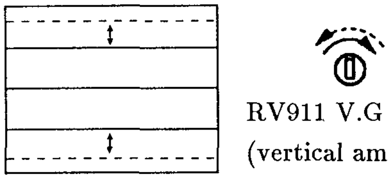
1. Input monoscope signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
   Similarly, select B OFF to cut off blue output.
3. Turn RV913 and RV960, the vertical green linearity variable resistors (V.G LIN VRs) on the D-board, to obtain an optimum vertical linearity. Then turn RV911, the vertical green amplitube variable resistor (V.G SIZE VR) to set vertical amplitude to 11.7 flames.
   Note: The vertical position indicator of the monoscope signal must be positioned at the center by adjusting RV905, the vertical green center position variable resistor (V.G CENT VR) in advance.



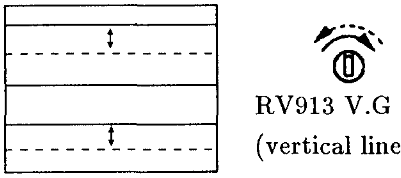
Monoscope signal



RV905 V.G CENT
(vertical position)

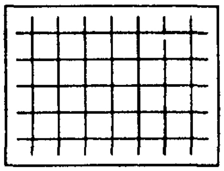


RV911 V.G SIZE
(vertical amplitude)



RV913 V.G LIN
(vertical linearity)

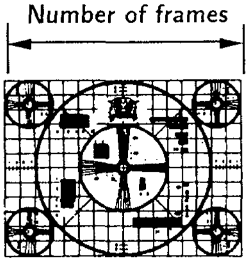
4. Verify that the horizontal lines on the top and bottom of cross-hatched area of the monoscope signal are horizontal and linear.



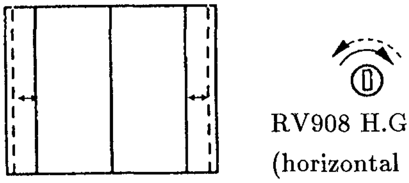
5. Turn RV916, RV964 and RV969, the horizontal green linearity variable resistors (H.G LIN VRs) on the D-board, to obtain an optimum horizontal linearity.

   Then turn RV908, the horizontal green amplitude variable resistor (H.G SIZE VR) to set horizontal amplitude to 15.6 frames.

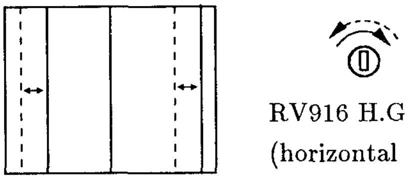
   Note: The horizontal position indicator of the monoscope signal must be positioned at the center by adjusting RV902, the horizontal green center position variable resistor (V.G CENT VR) in advance.



Monoscope signal



RV908 H.G SIZE
(horizontal position)



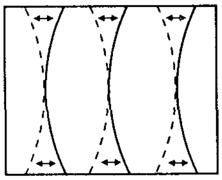
RV916 H.G LIN
(horizontal linearity)

6. Input cross hatch signal.
   Turn vertical green (V.G) and horizontal green (H.G) variable resistors (VRs) and make adjustments according to the following steps :

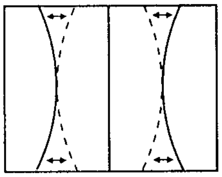
(Adjustment procedure)

1. [BOW] → [SKEW] → [CENT (center position)]
2. [PIN (pin warp)] → [SUB BOW] → [BOW]
3. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
4. [M.WAVE (middle sine wave warp)] →
   [WAVE-A (upper and lower sine wave warp)] →
   [WAVE-U (upper sine wave warp)]
   ※ For vertical (V) only.
5. [V-M.PIN (vertical middle pin warp)] →
   [V/WING (vertical wing warp)]
   ※ For vertical (V) only.
6. [H-M.PIN (horizontal middle pin warp)]
   ※ For horizontal (H) only.

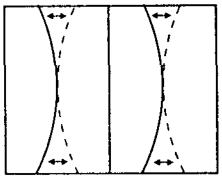
(Dot motion)



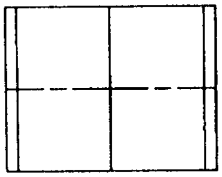
RV932 H.G BOW
(horizontal green bow)



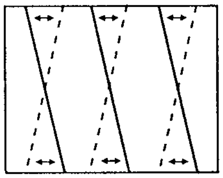
RV941 H.G PIN
(horizontal green pin warp)



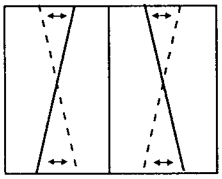
RV950 H.G SUB BOW
(horizontal green sub bow)



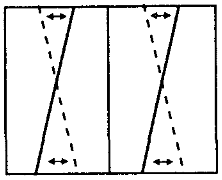
V.G BOW··················RV935
V.G PIN··················RV938
V.G SUB BOW··············RV953



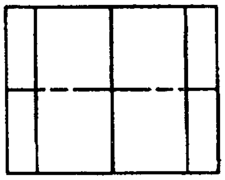
RV920 H.G SKEW
(horizontal green skew)



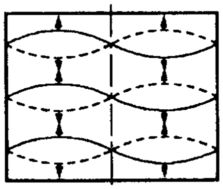
RV925 H.G KEYS
(horizontal green trapezoid)



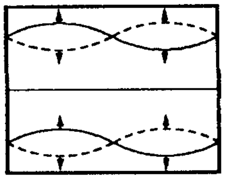
RV944 H.G SUB SKEW
(horizontal green sub skew)



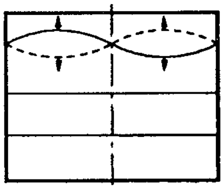
V.G SKEW·················RV923
V.G KEYS·················RV929
V.G SUB SKEW·············RV947



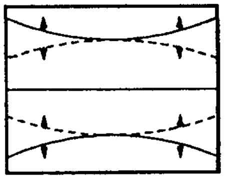
RV962 V-M-WAVE
(vertical middle sine wave warp)



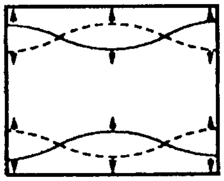
RV975 V-WAVE-A
(vertical upper and lower sine wave warp)



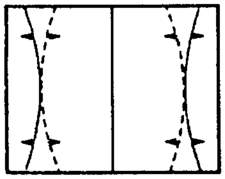
RV978 V-WAVE-U
(vertical upper sine wave warp)



RV980 V-M. PIN
(vertical middle pin warp)
※ Common in red, green, and blue



RV957 V/WING
(wing warp)
※ Common in red, green, and blue



RV956 H/M. PIN
(horizontal middle pin warp)

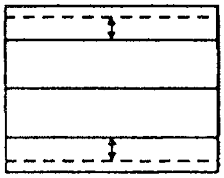
3-6. GREEN AND RED REGISTRATION ADJUSTMENTS

1. Input cross hatch signal.
2. Enter service mode. Select B OFF of SERVICE MODE to cut off blue output.
3. Turn the vertical red (V.R) and horizontal red (H. R) variable resistors (VRs) to adjust red picture convergence in relation to green picture according to the following steps :

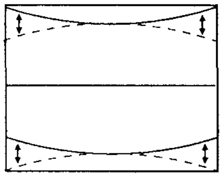
(Adjustment procedure)

1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)]
2. [BOW] → [SKEW] → [CENT (center position)]
3. [PIN (pin warp)] → [SUB BOW] → [BOW] [H/M. PIN (horizontal middle pin warp)]
4. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
5. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)]
   ※ For vertical (V) only.

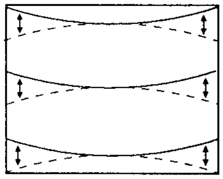
(Dot motion)



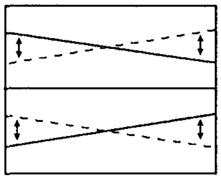
RV912 V.B SIZE
(vertical red amplitude)



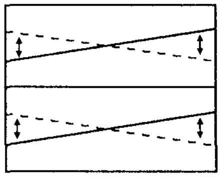
RV952 V.R SUB BOW
(vertical red sub bow)



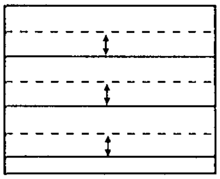
RV943 V.R BOW
(vertical red bow)



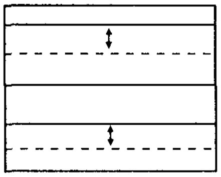
RV928 V.R KEYS
(vertical red trapezoid)



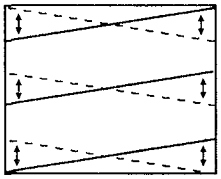
RV946 V.R SUB SKEW
(vertical red sub skew)



RV904 V.R CENT
(vertical red center position)



RV917 V.R LIN
(vertical red linearity)



RV922 V.R SKEW
(vertical red skew)

H.R LIN	RV915
H.R SIZE	RV907
H.R CENT	RV901
H.R BOW	RV931
H.R SKEW	RV919
H.R PIN	RV940
H.R KEYS	RV926
H.R SUB BOW	RV949
H.R SUB SKEW	RV943
V-M-WAVE	RV973
V-WAVE-A	RV976
V-WAVE-U	RV979
V-M.PIN	RV980
V/WING	RV957
H/M.PIN	RV956

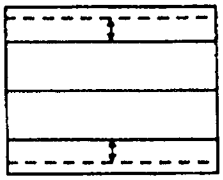
3-7. GREEN AND BLUE REGISTRATION ADJUSTMENTS

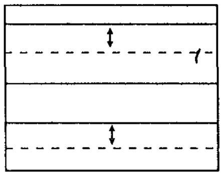
1. Input cross hatch signal.
2. Enter service mode. Select R OFF of SERVICE MODE to cut off red output.
3. Turn the vertical blue (V.B) and horizontal blue (H.B) variable resistors (VRs) to adjust blue picture convergence in relation to green picture according to the following steps :

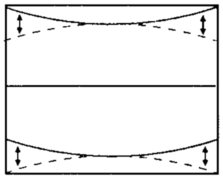
(Adjustment procedure)

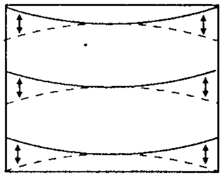
1. [LIN (linearity)] → [SIZE (amplitude)] → [CENT (center position)] →
2. [BOW] → [SKEW] → [CENT (center position)]
3. [PIN (pin warp)] → [SUB BOW] → [BOW] [H/M. PIN (horizontal middle pin warp)]
4. [KEYS (trapezoid)] → [SUB SKEW] → [SKEW]
5. [M.WAVE (middle sine wave warp)] → [WAVE-A (upper and lower sine wave warp)] → [WAVE-U (upper sine wave warp)] →

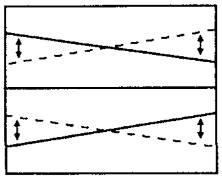
(Dot motion)

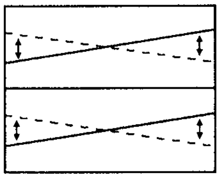

RV912 V.B SIZE
(vertical blue amplitude)

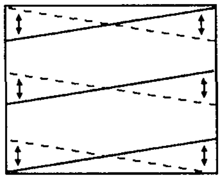

RV918 V.B LIN
(vertical blue linearity)

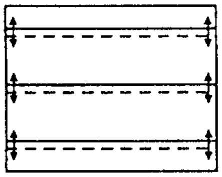

RV954 V.B SUB BOW
(horizontal blue sub bow)

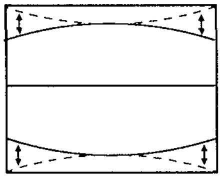

RV936 V.B BOW
(vertical blue bow)

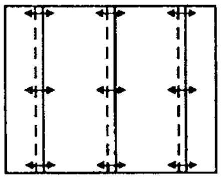

RV930 V.B KEYS
(vertical blue trapezoid)

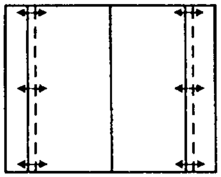

RV948 V.B SUB SKEW
(vertical blue sub skew)

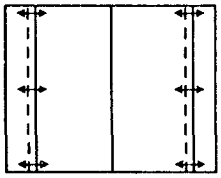

RV924 V.B SKEW
(vertical blue skew)

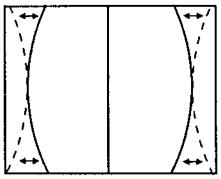

RV906 V.B CENT
(vertical blue center position)

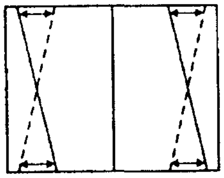

RV939 V.B PIN
(vertical blue pin warp)


RV903 H.B CENT
(vertical blue center position)

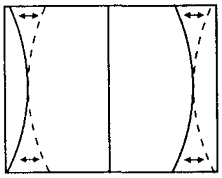

RV909 H.B SIZE
(horizontal blue amplitude)


RV914 H.B LIN
(horizontal blue linearity)

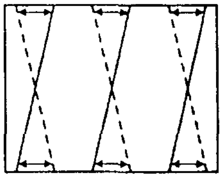

RV942 H.B PIN
(horizontal blue pin warp)



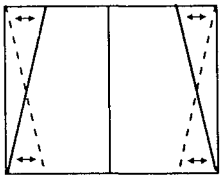
RV954 H.B SUB SKEW
(horizontal blue sub skew)



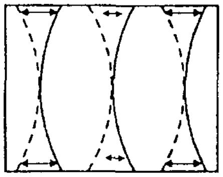
RV951 H.B SUB BOW
(horizontal blue sub bow)



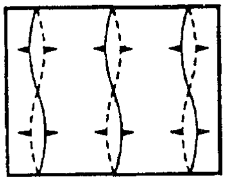
RV921 H.B SKEW
(horizontal blue skew)



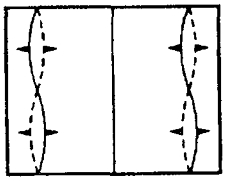
RV927 H.B KEYS
(horizontal blue trapezoid)



RV933 H.B BOW
(horizontal blue bow)



RV981
※ Common in red, green, and blue



RV982
※ Common in red, green, and blue

H/M PIN	RV958
M.WAVE	RV961
WAVE-A	RV974
WAVE-U	RV977

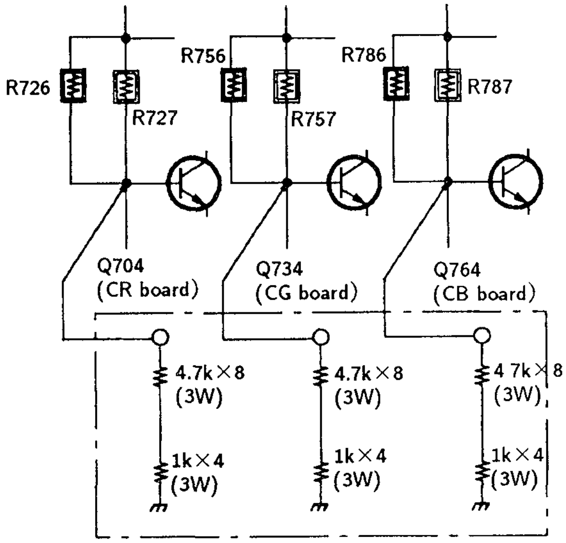
3-8. REGISTRATION CHECK

1. Out put red, blue, and green.
2. Out put cross hatch and monoscope signals to check registration. Also check focus.

3-9. WHITE BALANCE ADJUSTMENTS

1) Screen adjustment

1. Input white signal.
2. Remove connectors CR-15, CG-16, and CB-17.
3. Fit jigs between the ground and R726, R756, and R787.


R726
R727
R756
R757
R786
R787
Q704
(CR board)
Q734
(CG board)
Q764
(CB board)
4.7k×8
(3W)
4.7k×8
(3W)
4 7k×8
(3W)
1k×4
(3W)
1k×4
(3W)
1k×4
(3W)

※ Resistors in each jig are connected serial.

4. Turn the RGB (red, green, and blue) screen variable resistors in the focus block to make the flyback line faint. Stop before the line completely disappears.
5. Insert connectors CR-15, CG-16, and CB-17.

2) White balance adjustments (SBRT, GAMP, BAMP, GCUT, BCUT)

1. Input monoscope signal and enter service mode.
2. Select the picture quality adjustment from the menu and set PICTURE minimum.
3. Use the commander to adjust SBRT so that 10 IRE of the monoscope pattern becomes faintly luminous.
4. Input white signal.
5. Set PICTURE minimum. Adjust item GCUT and BCUT to obtain an optimum white balance.
6. Set PICTURE maximum. Adjust GAMP and BAMP to obtain an optimum white balance.
7. Repeat white balance adjustment alternating PICTURE setting at the minimum and maximum.

SECTION 4
SAFETY RELATED ADJUSTMENT

4-1. SAFETY RELATED ADJUSTMENTS

When replacing the following components, make the HV REGULATOR adjustments (on the N board)

◪ · ·HV block, IC803, IC805, D805, D807, C817, C818, C821, C836, C837, R824, R825, R827, R828, R834,R835, R836, R864, R865, R866, R902·

When replacing the following components, make the HV HOLD DOWN adjustments (on the N board)

◪······HV block, IC803, IC804, Q804, D806, D808, C809, C819, C820, C822, C823, C850, R807, R826, R829, R832, R833, R837, R838, R839, R840, R841, R892, R893, R900, R901

When replacing the following components, make the BEAM CURRENT PROTECTOR adjustments (on the N board)

◪ ·① IC802, Q805, Q807, D811, D812,C810, C824, C825, C826, C827, C831, R810, R843, R844, R847, R848, R849, R850, R851, R852, R853, R854, R881

② IC804, Q804, Q808, D808, D809, C809, C828,C829, C830, C831, R807, R839, R840, R841,R847, R848, R849, R850, R851, R852, R855, R856, R857, R881

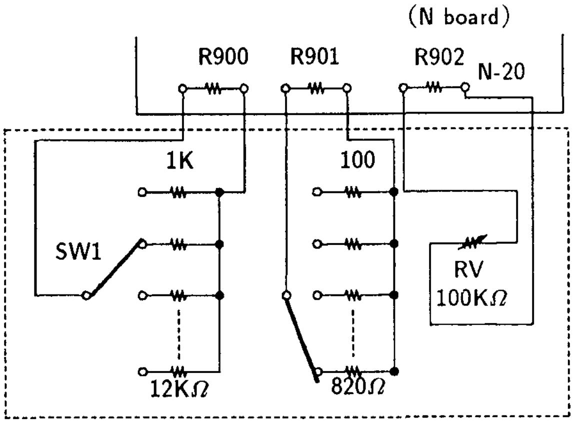
When replacing the following components, make the OVP CIRCUIT adjustments (on the G board)

◪·· · Q618, Q621, D628, C634, R639, R649, R652, R655, R656

— Checking with static voltmeter —

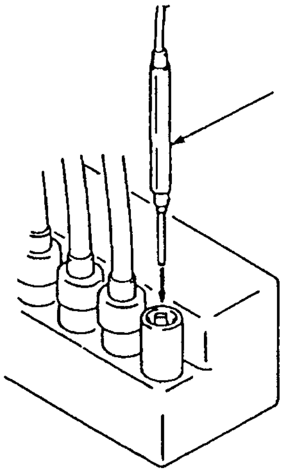
HV HOLD DOWN ADJUSTMENTS (◪R900, R901)

1. Verify that the power switch is off.
2. Connect the HV hold down adjustment resistance jig to the N20 connector on the N board.



(Adjustment jig)

3. Connect an external variable resistor (RV) to R 902 of the N board.
4. Remove the cap off from the unused terminal of the high voltage block. Connect a static voltmeter to the terminal.

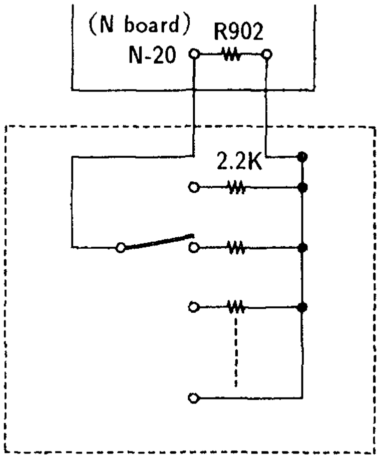


Remove the cap off from the unused terminal and connect a static voltmeter there

5. Receive 120 VAC power voltage and monoscope pattern signal. Maximize PICTURE and BRIGHTNESS.
6. Use the external variable resistor of the hold down adjustment jig to make the static voltmeter to read 33.50 ± 0.50kVDC.
7. Raise resistances with the jig until the HV hold down circuit is activated. Read the figures then, and mount resistance of the measured figures to R900 and R901.
   R900 : Must be 1kΩ to 12kΩ
   R901 : Must be Jw 100Ω to 820Ω
8. Turn on power again. Vary external variable resistance and confirm that the HV hold down circuit is activated at the reated value, 33.50± 0.50kV.

HV REGULATOR ADJUSTMENTS (⚠R902)

1. Connect the HV adjustment resistance jig to R902 of the N board.



(Adjustment jig)

2. Remove the red anode lead wire for the CRT tube from the high-voltage block and connect the static voltmeter instead.
3. Receive 120 VAC power voltage and monoscope pattern signal. Set PICTURE and BRIGHTNESS to the standard.
4. Turn on power. To adjust the resistance of R902 with the adjustment jig to read the rated value, 31.50±0.50kV.
5. Receive all-white signal. Set BRIGHTNESS to the standard. Maximize PICTURE. Confirm that the rated value, 31.50±0.50kV is read.
6. Cut off RGB by R OFF, G OFF, B OFF of the service commander. Verify that the rated value, 31.50±0.50kV, is read.

+B VOLTAGE CONFIRMATION

1. Receive 120±1 VAC power voltage and monoscope pattern signal. Set BRIGHTNESS to standard and maximize PICTURE.
2. Connect a digital multimeter between the 115V line and the ground on the G board, and confirm that the rated value, $115.0^{+2.0}_{-3.0}$V is read.

CHECKING AFTER REPLACING IC601

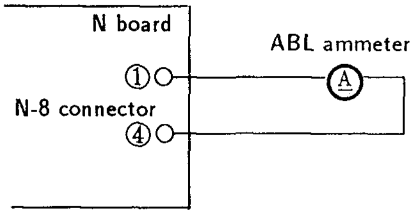
1. When replacing IC601, check the +B voltage.

CHECKING THE OVP (overvoltage protection) CIRCUIT (⚠R652)

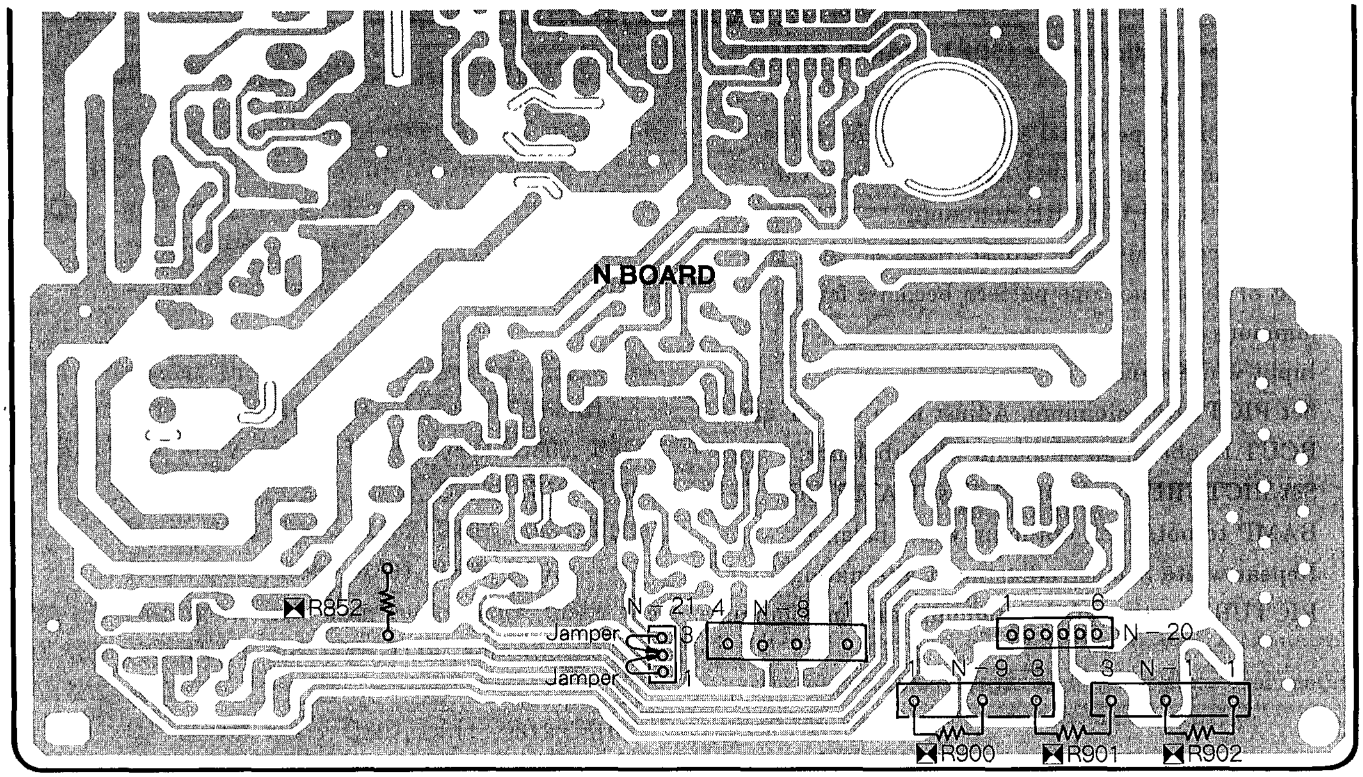
1. Receive 120 VAC power voltage and monoscope pattern signal. Maximize PICTURE and BRIGHTNESS.
2. Remove the jumper connector from the G-6 connector on the G board and connect a variable resistor (4.7 to 10kΩ) between pin ② and pin ③ of the G-6 connector.
3. Turn the variable resistor of 10kΩ and confirm that the OVP circuit is activated and luster disappears when +B voltage reads the rated value, 125.0±5.0 VDC.

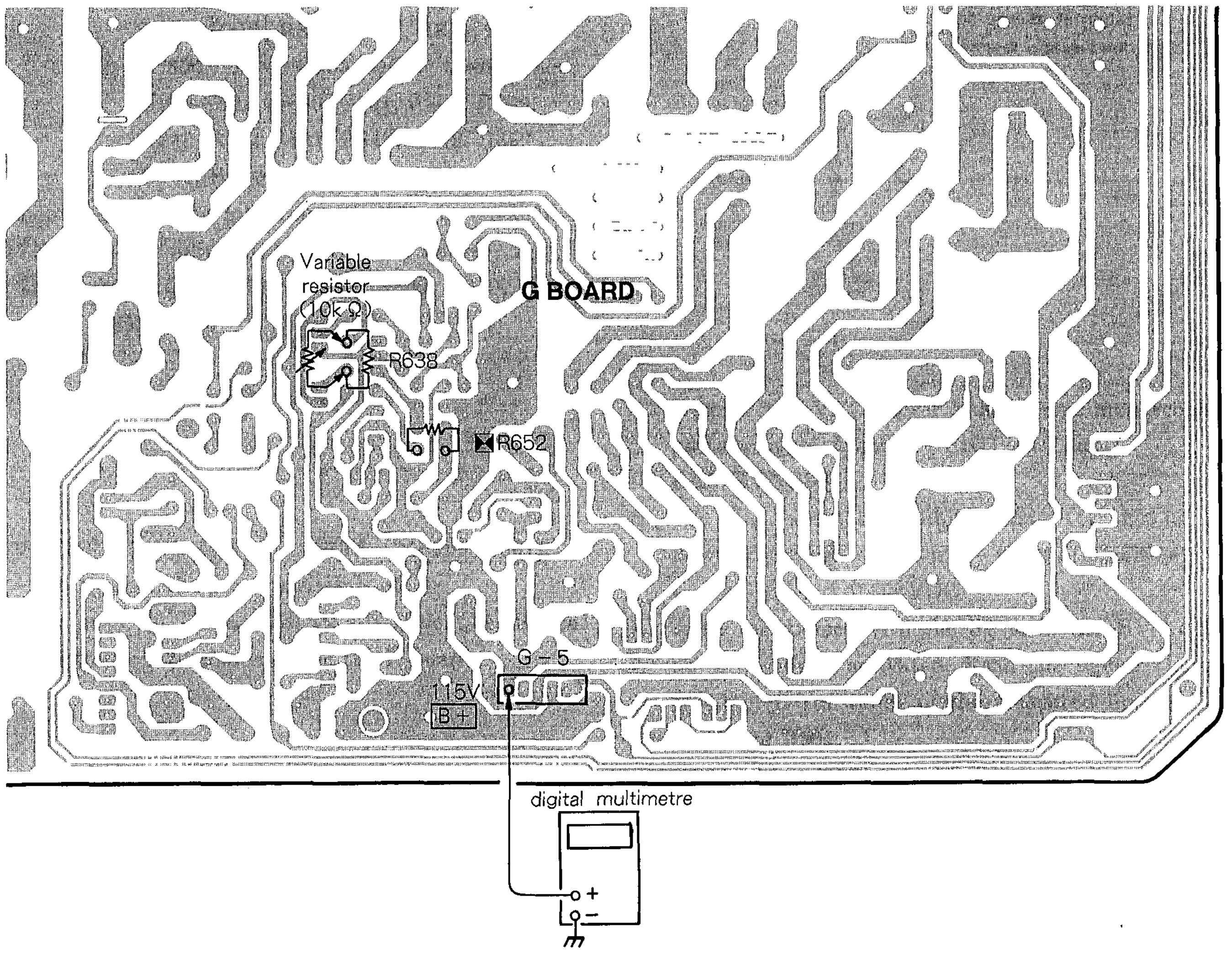
BEAM CURRENT PROTECTOR CHECK (⚠R852)

1. Receive 120 VAC power voltage and monoscope pattern signal. Maximize BRIGHTNESS.
2. Connect pin① and pin② of the N-21 connector. (on the N board)
3. Remove the jumper connector from the N-8 connector on the N board. Then connect an ABL ammeter between pin ① and pin ④ of the N-8 connector.



4. Raise PICTURE current gradually. Confirm that the beam current protector circuit is activated and luster disappears under the rated value, 3400 μA.
5. Connect pin③ and pin② of the N-21 connector. Verify that the protector circuit is activated and luster disappears similarly.

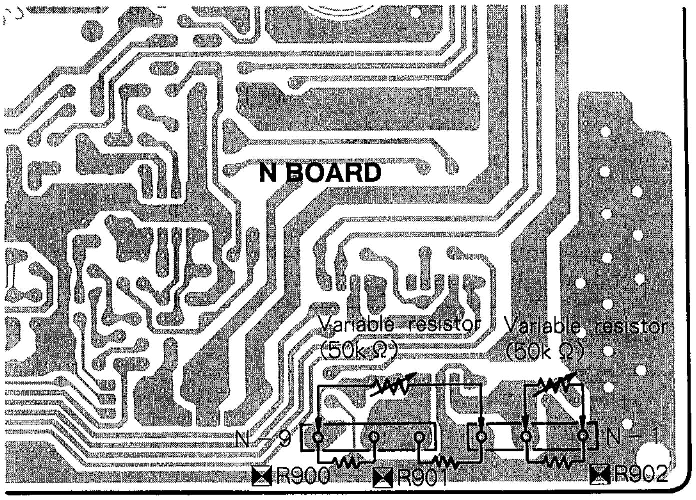

N BOARD
R852
N-21
4
N-8
1
Jamper
3
Jamper
1
1
6
N-20
1
N-9
3
3
N-1
1
R900
R901
R902


Variable resistor (10kΩ)
G BOARD
R638
R652
G-5
115V
B+
digital multimetre
+
−

— Checking without static voltmeter —

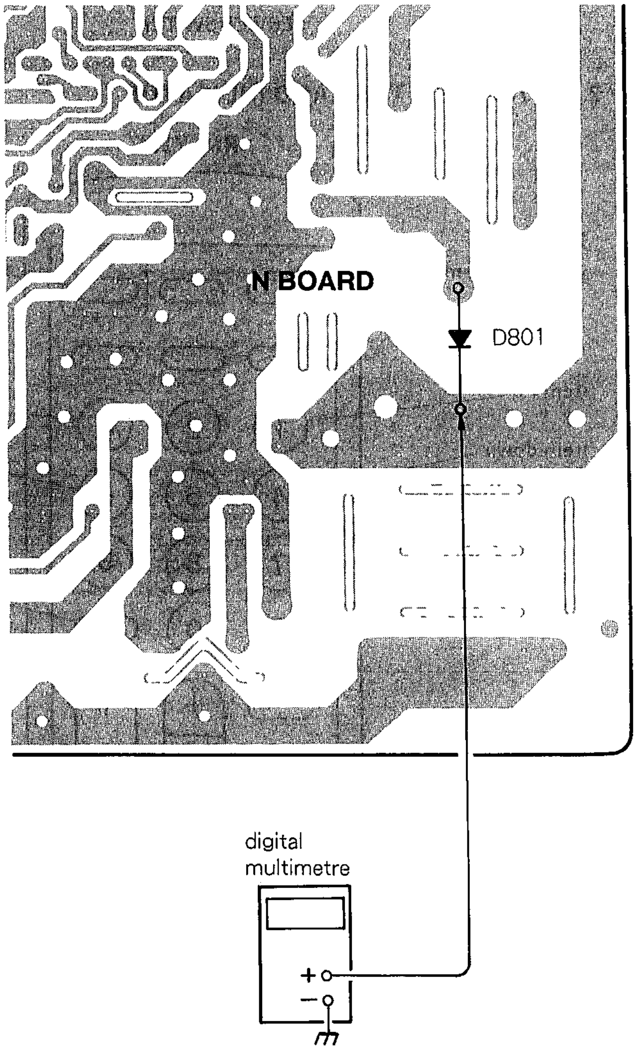
HV HOLD DOWN ADJUSTMENT (⊠R900, ⊠R901)

1. Receive all-white signal. Maximize PICTURE and BRIGHTNESS.
2. Remove R902 from the N board. Connect a variable resistor of 50kΩ on each end, and minimize the resistance.
3. Remove R900 and R901 from the N board. Connect a variable resistor of 50kΩ on each end, and minimize the resistance.
4. Connect a digital voltmeter between the D801 cathode and chassis ground of the N board.
5. Turn on the power switch. Adjust the variable resistors connected to the R902 of the N board to make the digital multimeter to read 145.0VDC.
6. Adjust the variable resistors connected to R900 and R901 on the N board so as to activate the HV hold down circuit and turn off the display.
7. Read the variable resistors connected to R900 and R901 and mount fixed resistors of measured resistance to the terminals.
   Note:Select fixed resistance from the following ranges.
   R900: 1kΩ to 12kΩ
   R901: Jw 100Ω to 820Ω
8. Maximize resistance of the variable resistor connected to R902 of the N board and turn on power.
9. Vary variable resistance at R902. Confirm that the HV hold down circuit is activated and the display is turned off when voltage reads 134±1.0V.



HV REGULATOR ADJUSTMENT (⊠R902)

1. Receive all-white signal. Maximize PICTURE and BRIGHTNESS.
2. Connect a variable resistor of 50kΩ on each end of R902 of the N board. Maximize resistance.
3. Connect a digital voltmeter between the D801 cathode and the chassis of the N board.
4. Turn on power. Adjust the variable resistor so that the digital multimeter reads 135.0V±1.0V.
5. Read the variable resistance then.
6. Mount a fixed resistor of the measured resistance to R902.
   Note: R902: Must be 2.2kΩ to 27kΩ
7. Turn on power again. Confirm that the digital multimeter reads 135.0V±1.0V.



SECTION 5
CIRCUIT ADJUSTMENTS

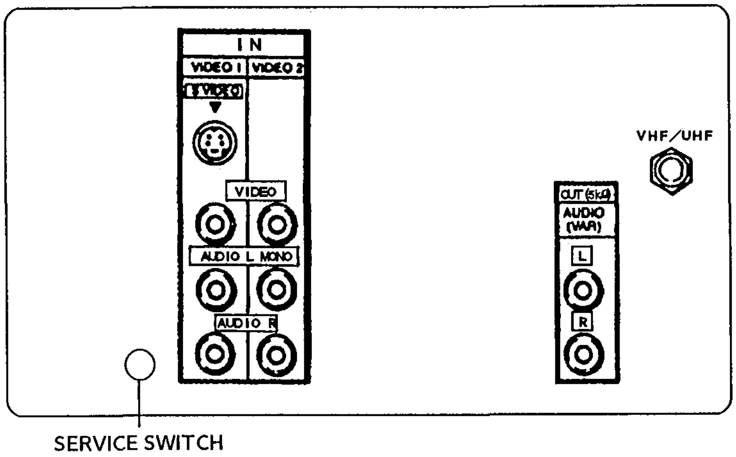
5-1. ELECTRICAL ADJUSTMENT BYREMOTE COMMANDER

Use of Remote Commander (RM-Y125) can be performed circuit adjustments about this model.

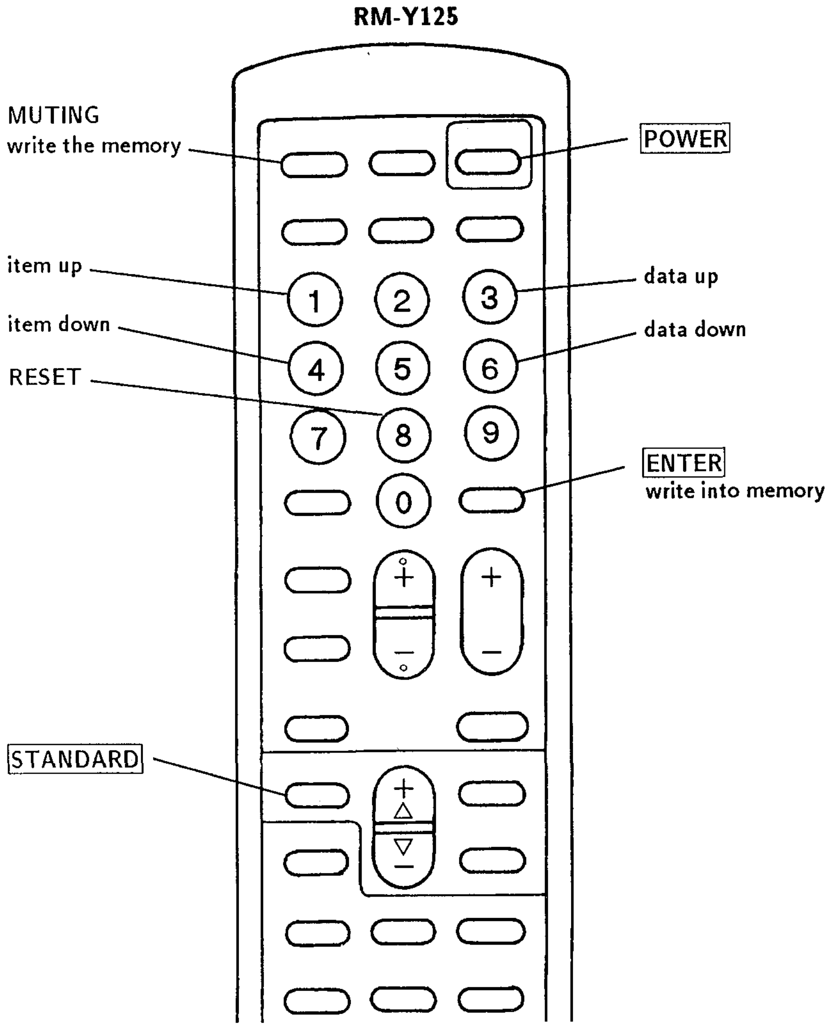
1. METHOD OF SETTING THE SERVICE MODE

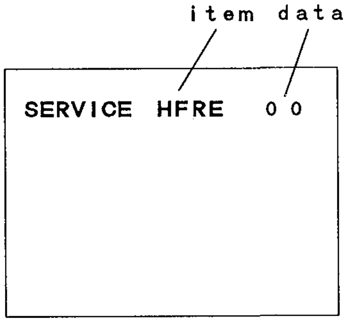
1) Press POWER button on the Remote Commander while pressing switch on the rear of the set.

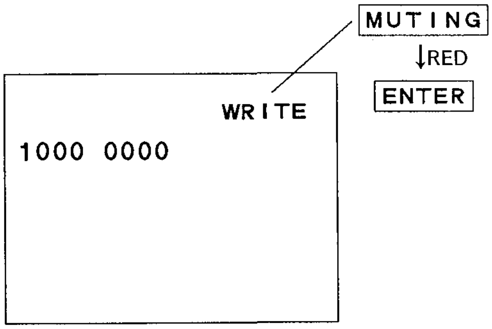
NOTE : Test Equipment Required.
1. Pattern Generator
2. Frequency counter
3. Digital multimeter
4. Audio OSC


IN
VIDEO 1
VIDEO 2
S VIDEO
VIDEO
AUDIO L MONO
AUDIO R
VHF/UHF
OUT (5kΩ)
AUDIO (VAR)
L
R
SERVICE SWITCH

2. ADJUST BUTTONS AND INDICATOR


RM-Y125
MUTING
write the memory
POWER
item up
data up
item down
data down
RESET
ENTER
write into memory
STANDARD
1
2
3
4
5
6
7
8
9
0


item
data
SERVICE HFRE 00


MUTING
↓RED
ENTER
WRITE
1000 0000

3. AN ITEM OF ADJUSTMENT

ITEM	REFERENCE DATA	NAME REGIST	
AFC	0	VP	AFC 1.0
HFRE	74	VP	H. FREQUENCE
VFRE	16	VP	V. FREQUENCE
VPOS	15	VP	V. SHIFT
VSIZ	31	VP	V. SIZE
VLIN	7	VP	V. LINEARITY
VSCO	7	VP	VS. CORRECTION
HPOS	5	VP	H. PHASE
GAMP	25	VP	GREEN AMP.
BAMP	20	VP	BLUE AMP.
GCUT	9	VP	GREEN CUT OFF.
BCUT	6	VP	BLUE CUT OFF
SPIX	30	VP	PICTURE
SHUE	29	VP	HUE
SCOL	28	VP	COLOR
SBRT	11	VP	BRIGHT
RGBP	28	VP	RGB PICTURE
SHAR	13		SHARPNESS
DISP	21		POSITION
VSMO	0	VP	VSMO
REF	1	VP	REF 1.0
ROFF	1	VP	OFF NR
GOFF	1	VP	OFF NG
BOFF	1	VP	OFF NB
ABLM	1	VP	ABLM
DRGB	0	VP	D RGB
TEST	0	AP	T
MPX	7	AP	ATT
FILO	31	AP	I 1
DEEM	7	AP	I 2
STEV	31	AP	OSC 1
SAPV	31	AP	OSC 2
PILO	7	AP	PILOT
SEP	31	AP	WIDE BAND
VD	7	AP	SPECTRAL
LVOL	0	AP	VOLUME-L
RVOL	0	AP	VOLUME-R
BASS	8	AP	BASS
TRE	8	AP	TREBLE
PHPO	32	PI	READ DELAY H
PVPO	8	PI	READ DELAY V
PLEV	6	PI	PICTURE LEVEL
PFCO	7	PI	FRAME COLOR
PPLL	1	PI	PLL OFF
PPVS	6	PI	VSP DEL
SHAD	0	PJ	SHADING
VMSW	0	PJ	VM
SCUT	16	PJ	SHAD CUT OFF
DSPP	30		POSITION

4. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press POWER button on the commander) in the next place, press POWER button again, hereupon it becomes TV mode.

5. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press 1 (UP) and 4 (DOWN), select an item of adjustments.
3) Press MUTING button indicate WRITE (RED) on screen.
4) Press ENTER button to write for memory.

6. MEMORY WRITE CONFIRMATION METHOD

```
          WRITE
1000  0000
```

1) After adjustment, pull out the plug from AC outlet, and next place, plug in AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again, confirm they were adjusted.

5-2. A BOARD ADJUSTMENTS

RF AGC ADJUSTMENT(IF BLOCK VR)

1) Input a color-bar signal.
2) Adjust AGC VR of TU 101 so that snow noise and cross-modulation disappear from the picture.
3) Confirm them at every channel.

H.FREQUENCY ADJUSTMENT (HFRE)

1) Set to Service Mode.
2) Input a color-bar signal.
3) Connect a frequency counter to pin③ of A-10 connector.
4) Call the item of AFC, set to 3 level (free run).
5) Select HFRE with 1 and 4.
6) Adjust 3 and 6 to the 15735± 60 Hz level.
7) Call the item of AFC again, adjust the level" 01 ".
8) Write into the memory by pressing MUTING → then ENTER.

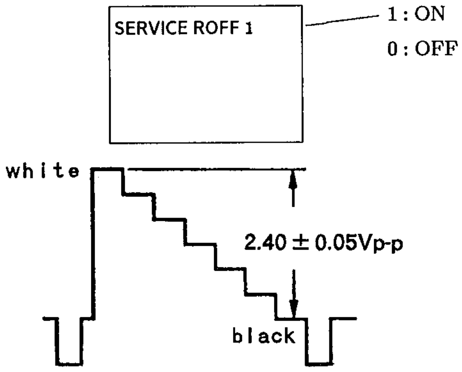
V.FREQUENCY ADJUSTMENT (VFRE)

1) Set the Service Mode.
2) Input an off-air signal (VIDEO IN → no signal).
3) Connect the frequency counter across connector ⑬pin of E 1-1 connector and ground.
4) Select VFRE with 1 and 4.
5) Adjust 3 and 6 to the 56 ±0.5 Hz.
6) Write the memory by pressing MUTING → then ENTER .

SUB CONTRAST ADJUSTMENT (SPIX)

1) Set to Service Mode.
2) Input a color-bar signal. (75 IRE)
3) Set the conditions as follows.

PICTURE	.... MAX
COLOR	.... MIN
BRIGHTNESS	.... MIN
TRINITONE	.... LOW
R OFF	.... ON
G OFF	.... OFF
B OFF	.... OFF

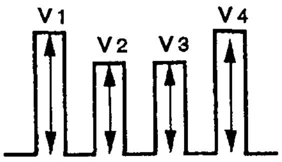


4) Connect an oscilloscope to ⑳pin of E1-1 connector on A board and ground.
5) Adjust 3 and 6 to the 2.40 ± 0.05Vp-p level by select-ing SPIX with 1 and 4.
6) Write the memory by pressing MUTING → then ENTER .
7) Return the following back to normal after adjustment.

G OFF	.... ON
B OFF	.... ON
COLOR	.... CENTER
BRIGHTNESS	.... CENTER
TRINITONE	.... HIGH
PICTURE	.... 80%

SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1) Input a color-bar signal.
2) Press STANDARD to normal.
3) Set to Service Mode.
4) Connect an oscilloscope to pin㉒ of E1-1 connector on A board and ground.
5) Adjust 3 and 4 to the V1=V4 and V2=V3 by select to SHUE and SCOL with 1 and 4. Lower the data 4 steps from this point.

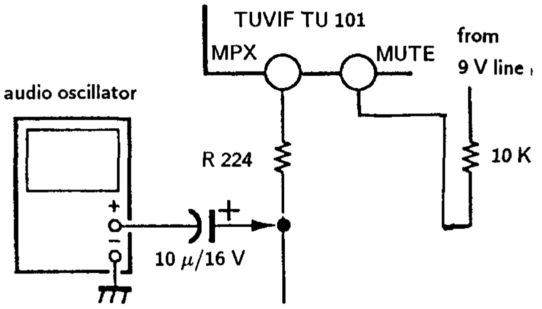


6) Write into the memory by pressing MUTING →then ENTER .

FILTER ADJUSTMENT (MPX, FILO)

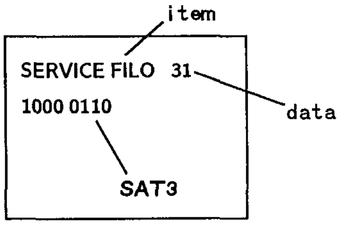
1) Set to Service Mode.
2) Select to TEST with 1 and 4, set the data to "1". Then select MPX and change data to "8" .
3) Connect an audio oscillator to R224 using a capacitor (10μ F/16V), set frequency to 62.936 kHz±0.1 kHz.

And then, through the 10kΩ resistor, feed 9.0V into the mute of TUVIF TU 101.


TUVIF TU 101
MPX
MUTE
from
9 V line
audio oscillator
R 224
10 K
+
−
10 μ/16 V

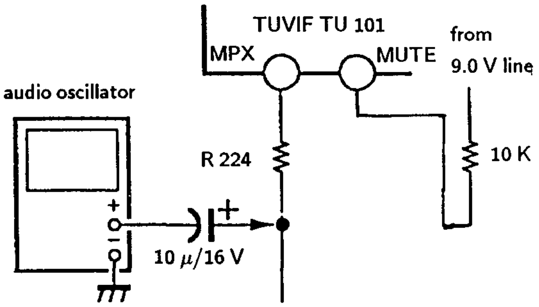
V 4 fh : SINE-WAVE 62.936 KHz±0.1 KHz
LEVEL 3.0 Vp-p

4) Make the data "00" by selecting FILO with 1 and 4 And then, send up the data gradually by pressing 6 . Set the data to D1 before SAT3 changing to 1 from 0.
5) Send up the data gradually. Set data D2 when SAT3 changes 0 from 1.
6) Adjust the data of FILO to $\frac{D1+D2}{2}$.
7) Write into the memory by pressing MUTING → then ENTER .


item
SERVICE FILO 31
1000 0110
data
SAT3

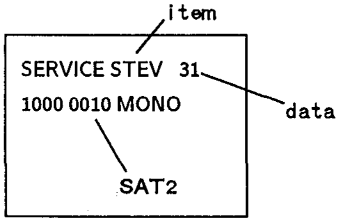
ST VCO ADJUSTMENT (MPX, STEV)

1) Set to Service Mode.
2) Select TEST with 1 and 4 , set the data to "1". And then press MTS to MONO.
3) Select MPX, set the data "8" .
4) Connect an audio oscillator to R 224 using electrolytic capacitor (10μ F/16V) and appply the frequency VST. Then, apply DC voltage to mute of TUVIF TU 101 using 10kΩ connect to 9.0 V line.


TUVIF TU 101
MPX
MUTE
from
9.0 V line
audio oscillator
R 224
10 K
+
−
10 μ/16 V

Vfh : SINE-WAVE 15.734 KHz±0.1 KHz
LEVEL 0.28 Vp-p

5) Select STEV with $\boxed{1}$ and $\boxed{4}$, set the data to "00" with $\boxed{6}$. And then, send up the data gradually. Set the data to D1 before SAT2 changes from 0 to 1.
6) Send up data gradually, set the data to D2 when SAT2 changes 1 from 0.
7) Adjust the data of STEV to (D 1+D 2)/2.
8) Write into the memory by pressing $\boxed{\text{MUTING}}$ → then $\boxed{\text{ENTER}}$.



MPX IN LEVEL ADJUSTMENT (MPX)

1) Set to Service Mode.
2) Select TEST with $\boxed{1}$ and $\boxed{4}$, set the data to "0" with $\boxed{6}$. And then press $\boxed{\text{MTS}}$ to MONO.
3) Select MPX with $\boxed{1}$ and $\boxed{4}$, set the data to "8" with $\boxed{3}$ and $\boxed{6}$.
4) Write into the memory by pressing $\boxed{\text{MUTING}}$ → then $\boxed{\text{ENTER}}$.

PILOT CANCEL ADJUSTMENT (PILO)

1) Set to the Service Mode.
2) Select PILO with $\boxed{1}$ and $\boxed{4}$, set the data to "8" with $\boxed{3}$ and $\boxed{6}$.
3) Write into the memory by pressing $\boxed{\text{MUTING}}$ → then $\boxed{\text{ENTER}}$.

SAP VCO f_0 ADJUSTMENT (SAPV)

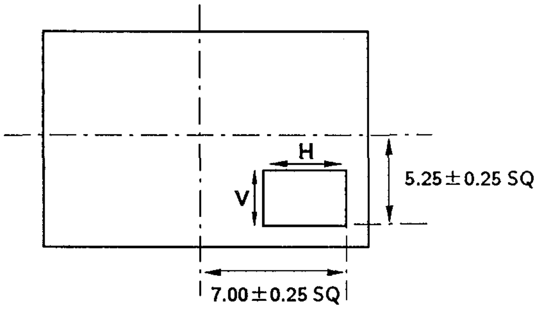
1) Set to Service Mode.
2) Input a stereo broadcast signal with SAP.
3) Select TEST with $\boxed{1}$ and $\boxed{4}$, set the data to "0" . And then, press $\boxed{\text{MTS}}$ to MAIN.
4) Connect a digital multimeter to TP-1(DBX). This voltage reading will equal V 1.
5) Press MTS to SAP and this voltage will equal V 2.
6) Select SAPV with $\boxed{1}$ and $\boxed{4}$, adjust $\boxed{3}$ and $\boxed{6}$ so that V 2=V 1±0.03 VDC.
7) Write the memory by $\boxed{\text{MUTING}}$ → $\boxed{\text{ENTER}}$.

SEPARATION ADJUSTMENT (SEP)

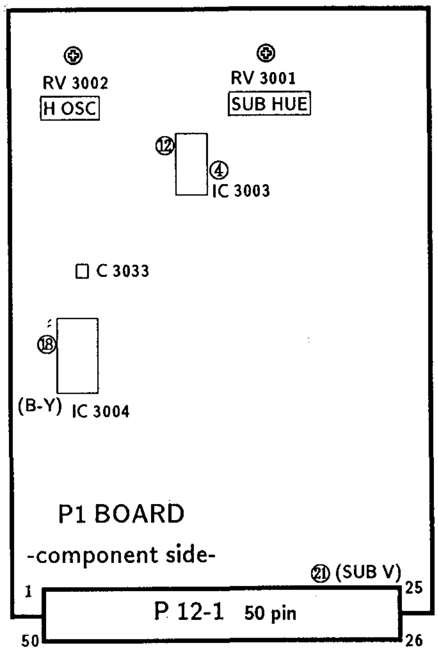
1) Set to Service Mode.
2) Press $\boxed{\text{MTS}}$ to MAIN and receive a monoral broad-cast signal.
In the next step, receive a stereo broadcast signal.
3) Select SEP and VD with $\boxed{1}$ and $\boxed{4}$, adjust $\boxed{3}$ and $\boxed{6}$ so that a clear stereo sound is effected.

SUB PICTURE POSITION ADJUSTMENT (PHPO, PVPO)

1) Input a cross hatch signal.
2) Set to service mode.
3) Press PIP to display a sub picture. (RIGHT LOWER Position)
4) Select PHPO, PVPO with $\boxed{1}$ and $\boxed{4}$.
5) Adjust $\boxed{3}$ and $\boxed{6}$ to the standard as shown below.
6) Write the memory by pressing $\boxed{\text{MUTING}}$ → then $\boxed{\text{ENTER}}$.

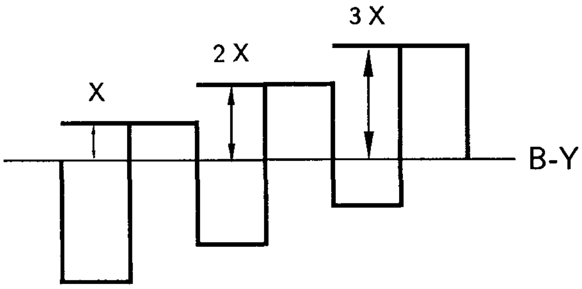


5-3. P1 BOARD ADJUSTMENTS


RV 3002
H OSC
RV 3001
SUB HUE
⑫
④
IC 3003
C 3033
⑱
(B-Y) IC 3004
P1 BOARD
-component side-
㉑ (SUB V)
1
25
P 12-1 50 pin
50
26

SUB HUE ADJUSTMENT (RV 3001)

1) Set HUE and COLOR to the standard condition.
2) Make adjustment so that B-Y signal as shown to the right is obtained at the crossing point of R 3009 (0 Ω) and C 3033.
3) Supply the color bar signal of 75 IRE (white) at 2 Vpp to Pin ㉑ (SUB V) of P 12-1 and make adjustment by turning RV 3001.

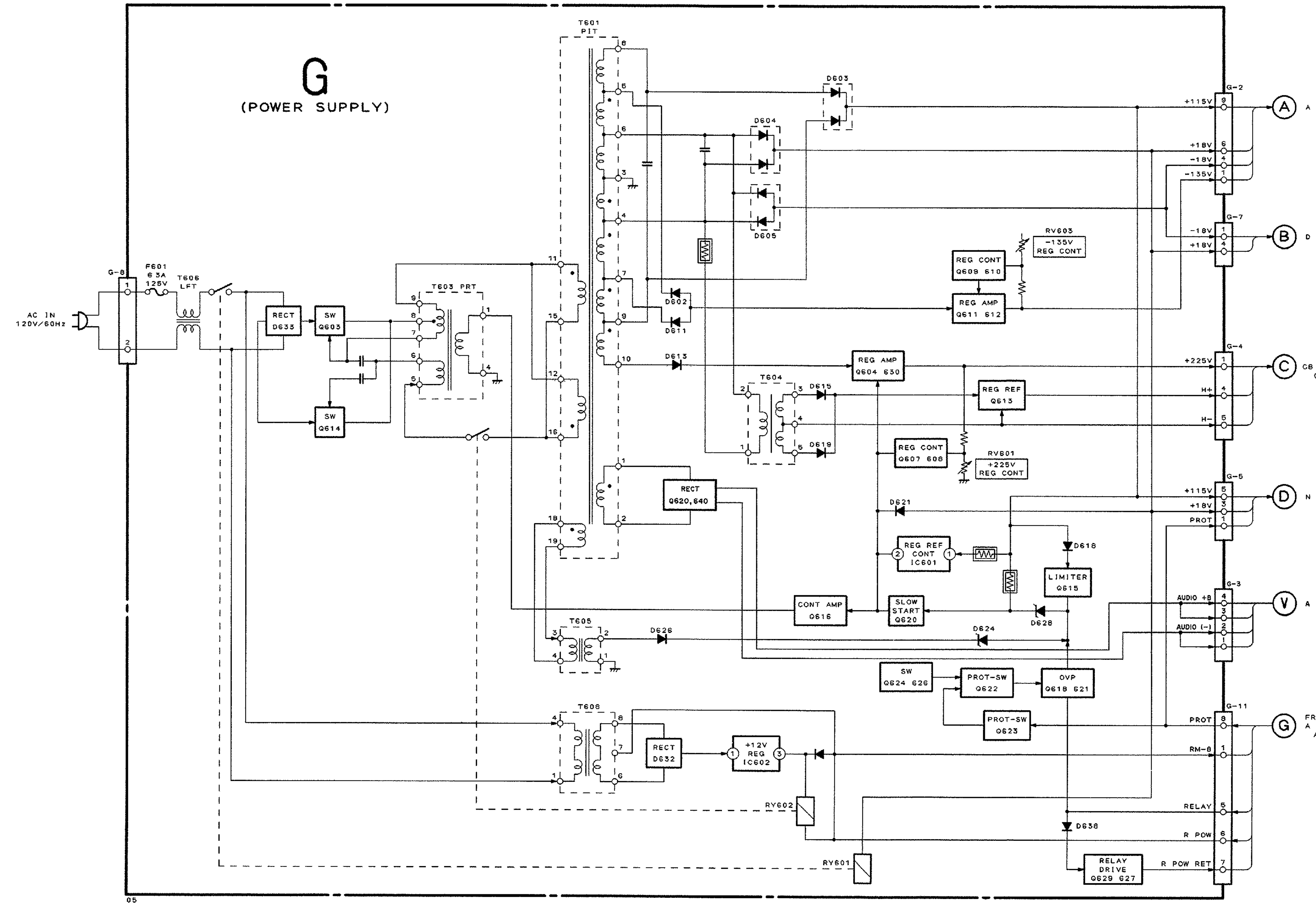


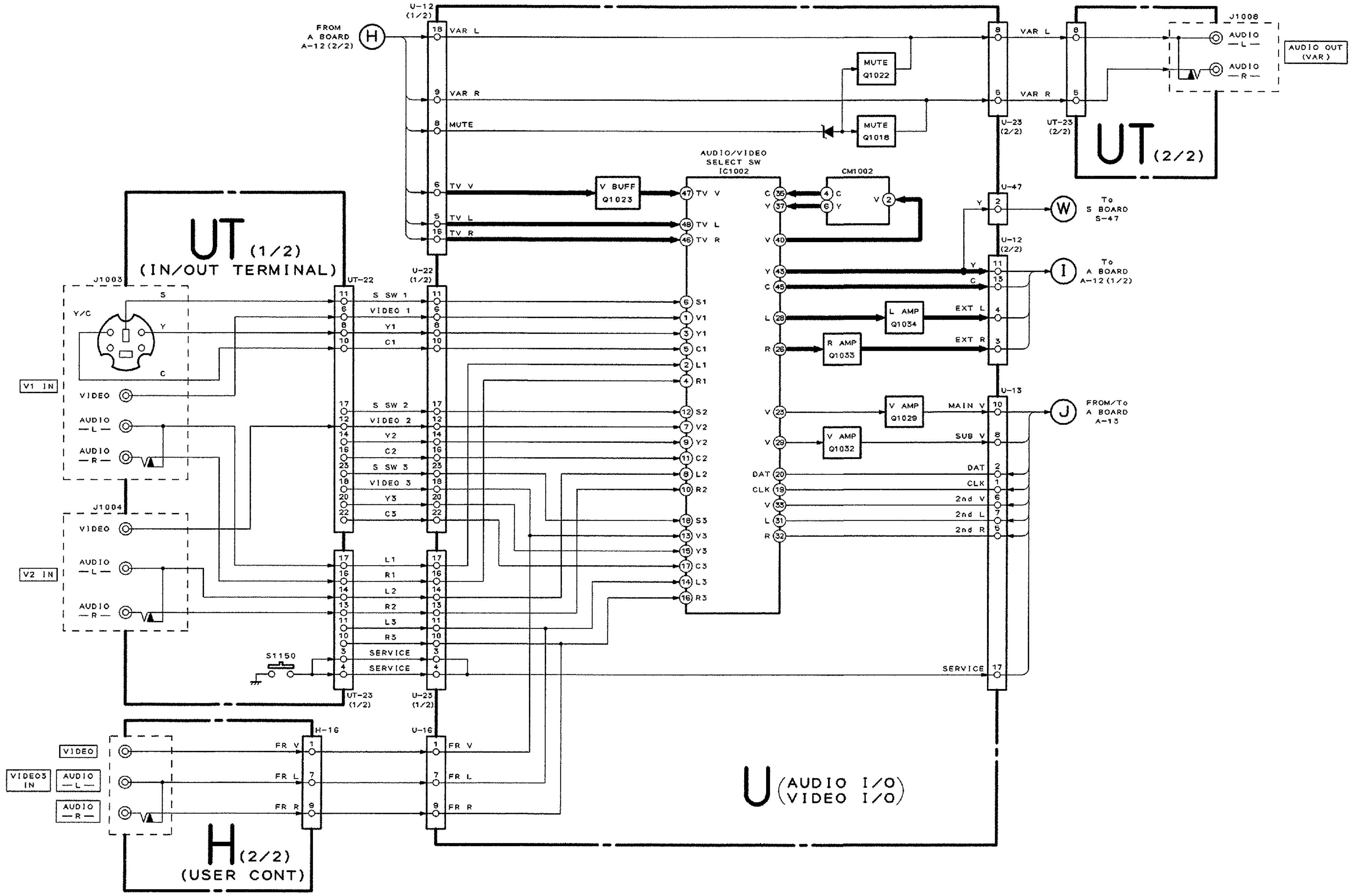
H. FREQUENCY (H OSC) ADJUSTMENT (RV-3002)

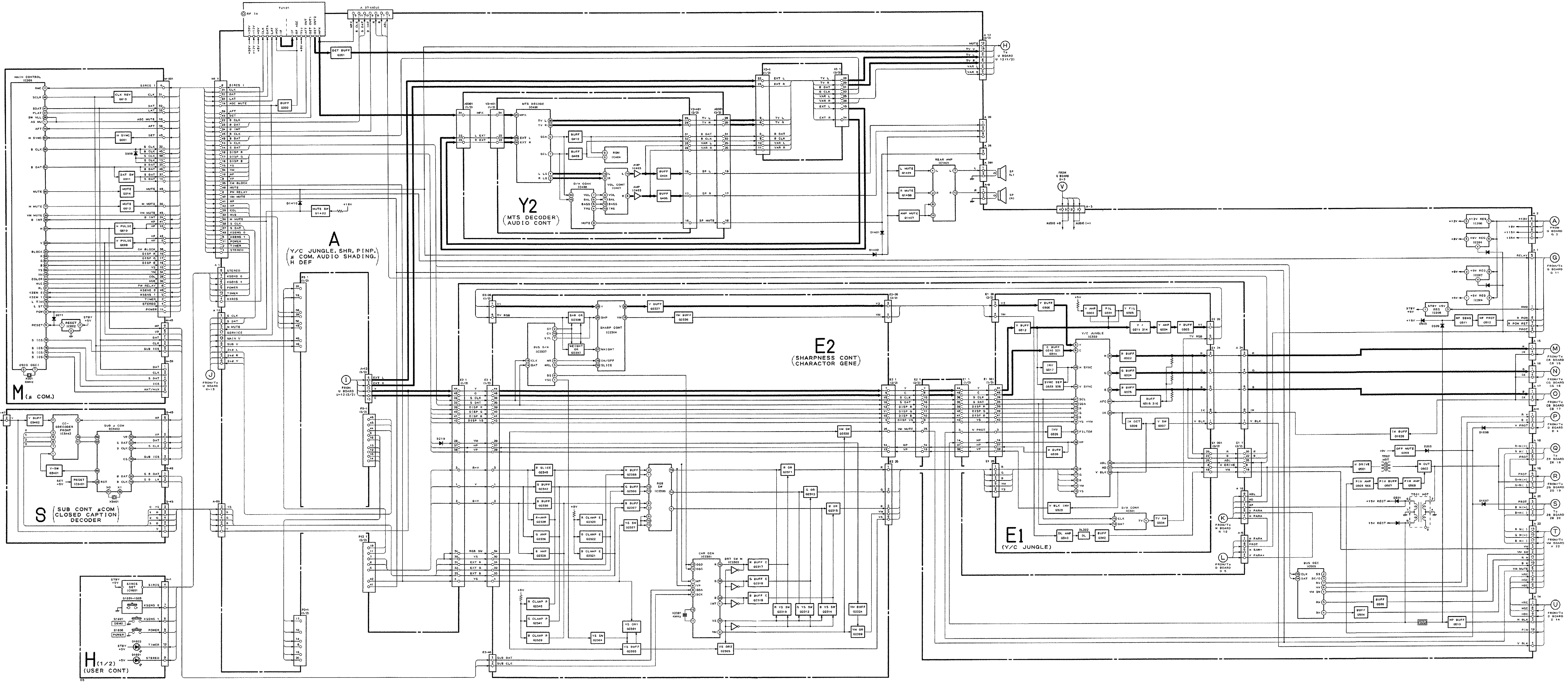
1) Connect a frequency counter to Pin ④ (H OUT) of IC 3003.
2) Connect Pin ⑫ of IC 3003 to ground.
3) Adjust RV3002 for a frequency of 15.734 kHz ± 50 Hz at Pin ④ of IC 3003.
(or until the frequency comes to a standstill.)

SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAMS (1)


G
(POWER SUPPLY)
AC IN 120V/60Hz
G-8
F601 6.3A 125V
T606 LFT
RECT D633
SW Q603
SW Q614
T603 PRT
T601 PIT
D603
D604
D605
D602
D611
D613
T604
D615
D619
T605
D626
T606
RECT D632
+12V REG IC602
RY602
RY601
REG CONT Q609 610
REG AMP Q611 612
RV603 -135V REG CONT
REG AMP Q604 630
REG REF Q613
REG CONT Q607 608
RV601 +225V REG CONT
RECT Q620,640
D621
REG REF CONT IC601
D618
LIMITER Q615
CONT AMP Q616
SLOW START Q620
D624
D628
SW Q624 626
PROT-SW Q622
OVP Q618 621
PROT-SW Q623
D636
RELAY DRIVE Q629 627
G-2
+115V
+18V
-18V
-135V
A To A BOARD A-2
G-7
B To D BOARD D-7
G-4
+225V
H+
H-
C To CB BOARD CB-4
G-5
PROT
D To N BOARD N-5
G-3
AUDIO +8
AUDIO (-)
V To A BOARD A-3
G-11
PROT
RM-8
RELAY
R POW
R POW RET
G FROM/To A BOARD A-11

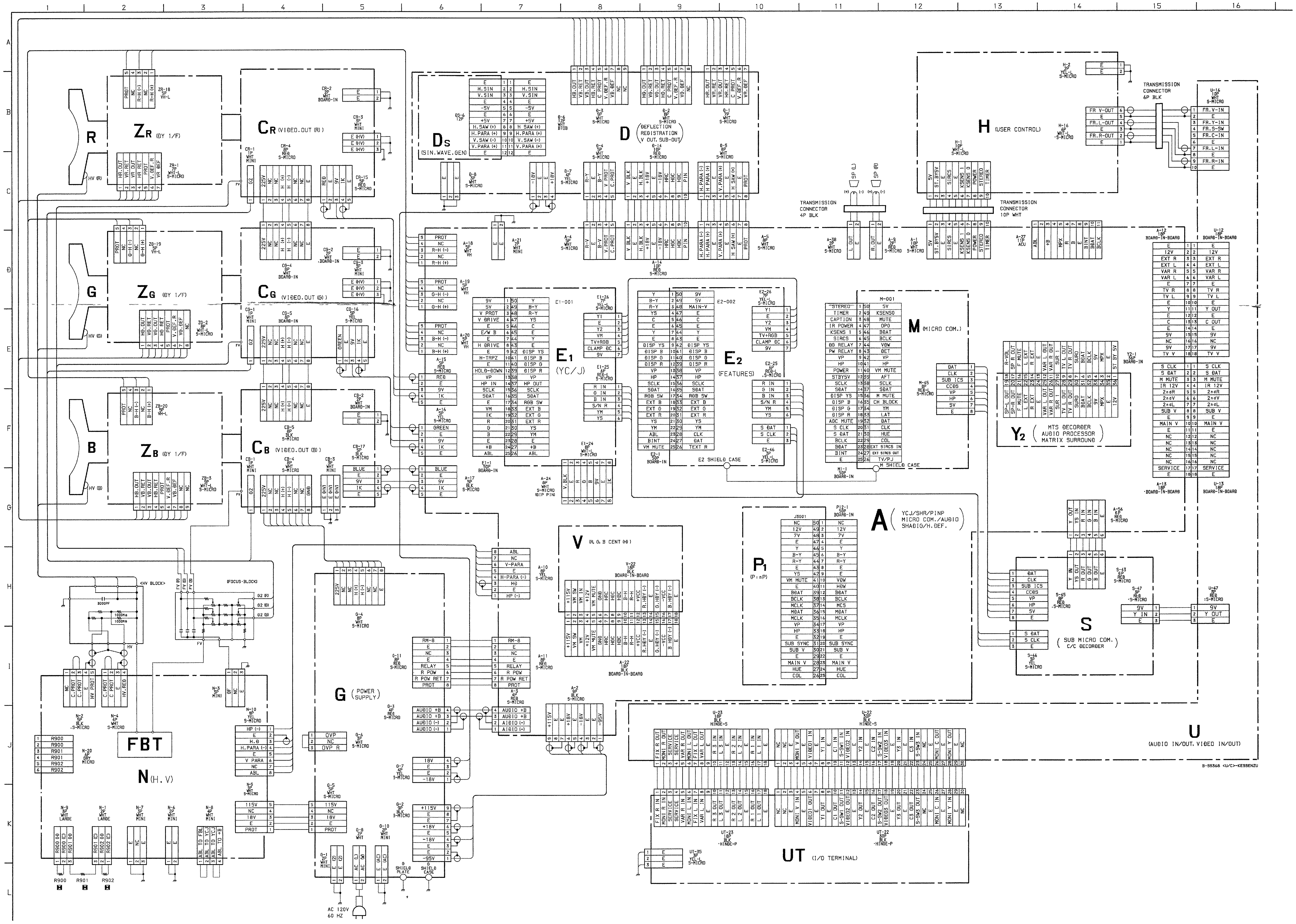

FROM A BOARD A-12(2/2)
H
U-12 (1/2)
VAR L
VAR R
MUTE
TV V
TV L
TV R
MUTE Q1022
MUTE Q1016
J1006
AUDIO L
AUDIO R
AUDIO OUT (VAR)
UT(2/2)
U-23 (2/2)
UT-23 (2/2)
AUDIO/VIDEO SELECT SW IC1002
V BUFF Q1023
CM1002
U-47
W To S BOARD S-47
U-12 (2/2)
I To A BOARD A-12(1/2)
L AMP Q1034
R AMP Q1033
EXT L
EXT R
U-13
V AMP Q1029
V AMP Q1032
MAIN V
SUB V
DAT
CLK
2nd V
2nd L
2nd R
J FROM/To A BOARD A-13
SERVICE
UT(1/2)
(IN/OUT TERMINAL)
J1003
Y/C
V1 IN
VIDEO
AUDIO L
AUDIO R
J1004
V2 IN
UT-22
U-22 (1/2)
S SW 1
VIDEO 1
Y1
C1
S SW 2
VIDEO 2
Y2
C2
S SW 3
VIDEO 3
Y3
C3
L1
R1
L2
R2
L3
R3
SERVICE
S1150
UT-23 (1/2)
U-23 (1/2)
VIDEO3 IN
H-16
U-16
FR V
FR L
FR R
H(2/2)
(USER CONT)
U(AUDIO I/O)
(VIDEO I/O)


M (μ COM.)
S (SUB CONT μCOM CLOSED CAPTION DECODER)
H (1/2) (USER CONT)
Y2 (MTS DECODER AUDIO CONT)
A (Y/C JUNGLE, SHR, PINP, μ COM, AUDIO SHADING, H DEF)
E2 (SHARPNESS CONT CHARACTOR GENE)
E1 (Y/C JUNGLE)

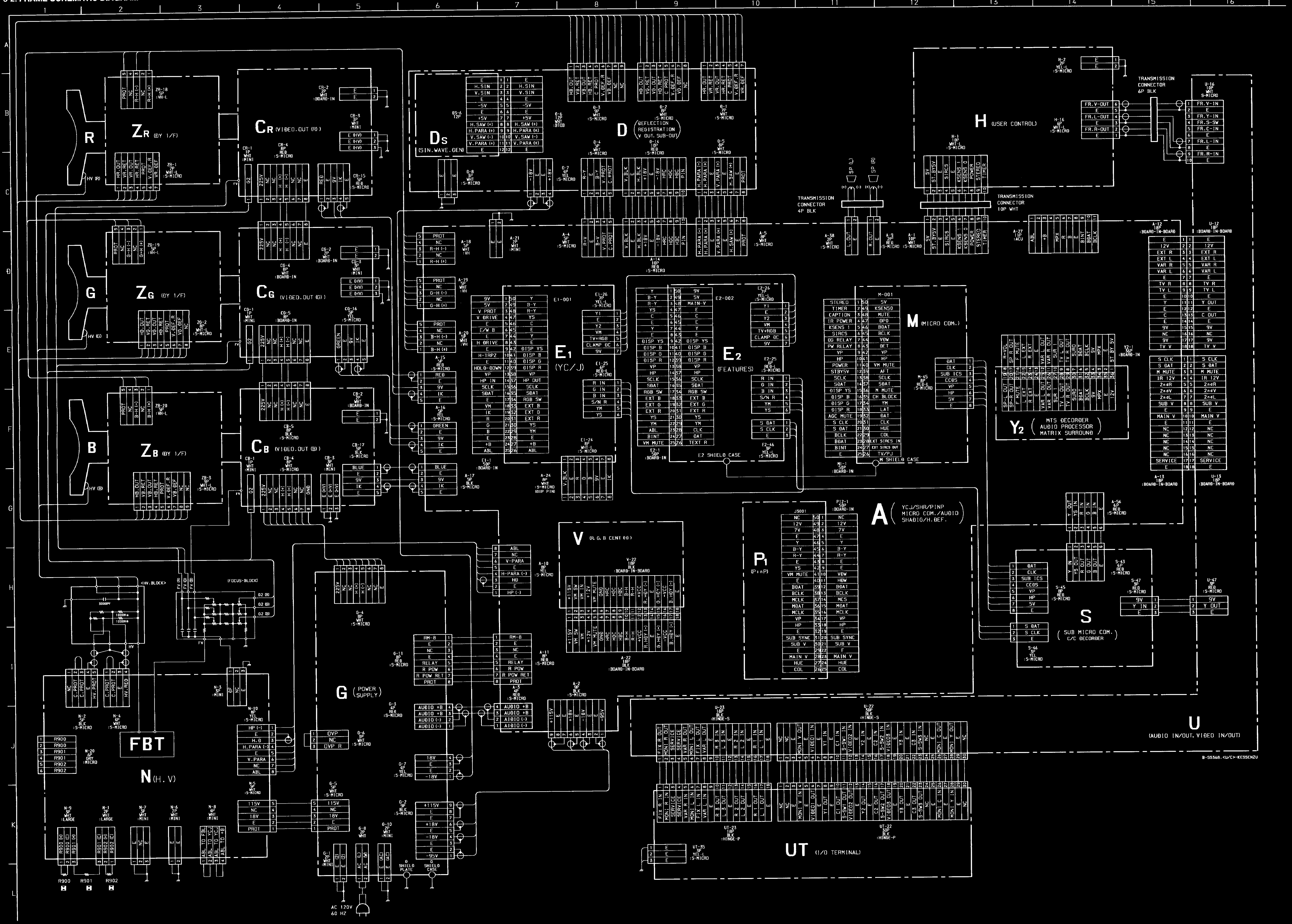
BLOCK DIAGRAMS (3)

DS
(H/V SIN. WAVE GEN)
WAVE GEN IC902
MULTIPLIER IC910
D
(REGISTRATION, DEFLECTION, V OUT, SUB OUT)
V (R.G.B CENT (H))
N (HV)
ZR (R DY IF)
ZG (G DY IF)
ZB (B DY IF)
CR (R OUT)
CG (G OUT)
CB (B OUT)
HV BLOCK
FOCUS BLOCK
V901 PICTURE TUBE
V902 PICTURE TUBE
V903 PICTURE TUBE

6-2. FRAME SCHEMATIC DIAGRAM

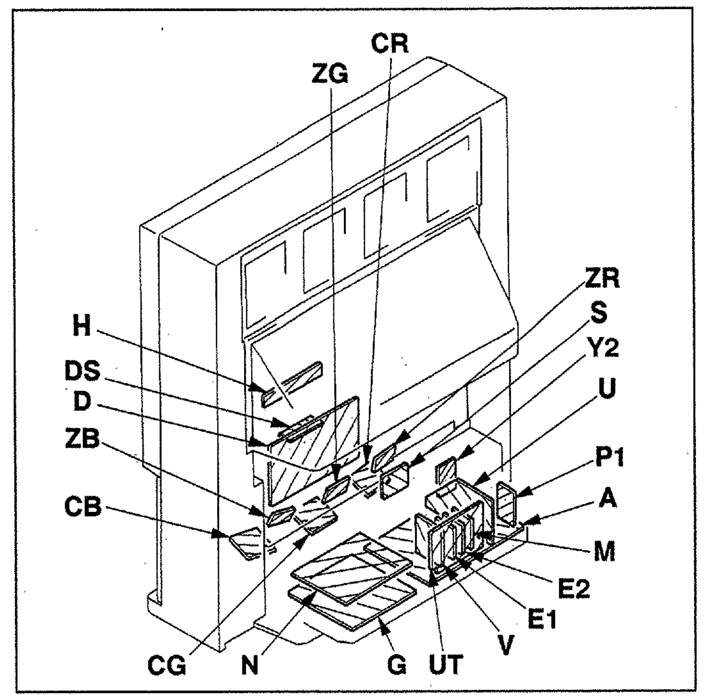

R
Z_R (BY 1/F)
C_R (VIDEO.OUT (R))
G
Z_G (BY 1/F)
C_G (VIDEO.OUT (G))
B
Z_B (BY 1/F)
C_B (VIDEO.OUT (B))
D_S (SIN.WAVE.GEN)
D (DEFLECTION REGISTRATION V OUT, SUB-OUT)
H (USER CONTROL)
TRANSMISSION CONNECTOR 6P BLK
TRANSMISSION CONNECTOR 4P BLK
TRANSMISSION CONNECTOR 10P WHT
E1 (YC/J)
E2 (FEATURES)
E2 SHIELD CASE
M (MICRO COM.)
M SHIELD CASE
Y2 (MTS DECORDER AUDIO PROCESSOR MATRIX SURROUND)
A (YCJ/SHR/PINP MICRO COM./AUDIO SHADIG/H.DEF.)
P1 (P in P)
V (R, G, B CENT (H))
S (SUB MICRO COM. C/C DECORDER)
U (AUDIO IN/OUT, VIDEO IN/OUT)
UT (I/O TERMINAL)
G (POWER SUPPLY)
<HV BLOCK>
(FOCUS-BLOCK)
FBT
N (H. V)
AC 120V 60 HZ
SHIELD PLATE
SHIELD CASE
B-SS368 <U/C>-KESSENZU

6-2. FRAME SCHEMATIC DIAGRAM



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
K
L
R
ZR (BY 1/F)
CR (VIDEO OUT (R))
HV (R)
G
ZG (BY 1/F)
CG (VIDEO OUT (G))
HV (G)
B
ZB (BY 1/F)
CB (VIDEO OUT (B))
HV (B)
DS (SIN.WAVE.GEN)
D (DEFLECTION REGISTRATION V OUT, SUB-OUT)
H (USER CONTROL)
TRANSMISSION CONNECTOR 6P BLK
TRANSMISSION CONNECTOR 4P BLK
TRANSMISSION CONNECTOR 10P WHT
SP (L)
SP (R)
E1 (YC/J)
E2 (FEATURES)
E2 SHIELD CASE
M (MICRO COM.)
M SHIELD CASE
Y2 (MTS DECORDER AUDIO PROCESSOR MATRIX SURROUND)
A (YCJ/SHR/PINP MICRO COM./AUDIO SHADIG/H.DEF.)
P1 (PinP)
V (R, G, B CENT (6))
S (SUB MICRO COM. C/C DECORDER)
G (POWER SUPPLY)
FBT
N (H. V)
<HV.BLOCK>
[FOCUS·BLOCK]
U (AUDIO IN/OUT, VIDEO IN/OUT)
UT (I/O TERMINAL)
SHIELD PLATE
SHIELD CASE
AC 120V 60 HZ
R900
R901
R902

6-3. CIRCUIT BOARDS LOCATION


ZG
CR
ZR
S
Y2
U
P1
A
M
E2
E1
V
UT
G
N
CG
CB
ZB
D
DS
H

6-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  kΩ =1000Ω , MΩ =1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

  Pitch: 5 mm
  Rating electrical power ¼ W

- ▭ : nonflammable resistor.
- ▭ : fusible resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ⏚ : earth-chassis.
- The components identified by ☒ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.
- When replacing components identified by ◪ , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by ☒ and repeat the adjustment until the specified value is achieved. (Refer to R652, R852, R900, R901, and R902 adjustment on Page 36~39.)
  When replacing the part in below table, be sure to perform the related adjustment.

Part replaced (◪)		Adjustment (☒)
HV Block IC803, IC805, D805, D807, C817, C818, C821, C836, C837, R824, R825, R827, R828, R834, R835, R836, R864, R865, R866, R902	N Board	HV Regurater (R902)
HV Block IC803, IC804, Q804, D806, D808, C809, C819, C820, C822, C823, C850, R807, R826, R829, R832, R833, R837, R838, R839, R840, R841, R892, R893, R900, R901	N Board	HV Hold down (R900, R901)
Q618, Q621, D628, C634, R639, R649, R652, R655, R656	G Board	OVP (R652)
① IC802, Q805, Q807, D811, D812, C810, C824, C825, C826, C827, C831, R810, R843, R844, R847, R848, R849, R850, R851, R852, R853, R854, R881	N Board	Beam current protecter ① R852 ② R852
② IC804, Q804, Q808, D808, D809, C809, C828, C829, C830, C831, R807, R839, R840, R841, R847, R848, R849, R850, R851, R852, R855, R856, R857, R881	N Board	

Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

- Readings are taken with a color-bar signal input.
- Readings are taken with a 10MΩ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
  * : Can not be measured.
- Circled numbers are waveform references.
- ▬▬▬ : B+ bus.
- ▬ ▬ ▬ : B− bus.
- ▒▒▒ : signal path. (RF)

Note: The symbol ⊟ display is on the component sde.

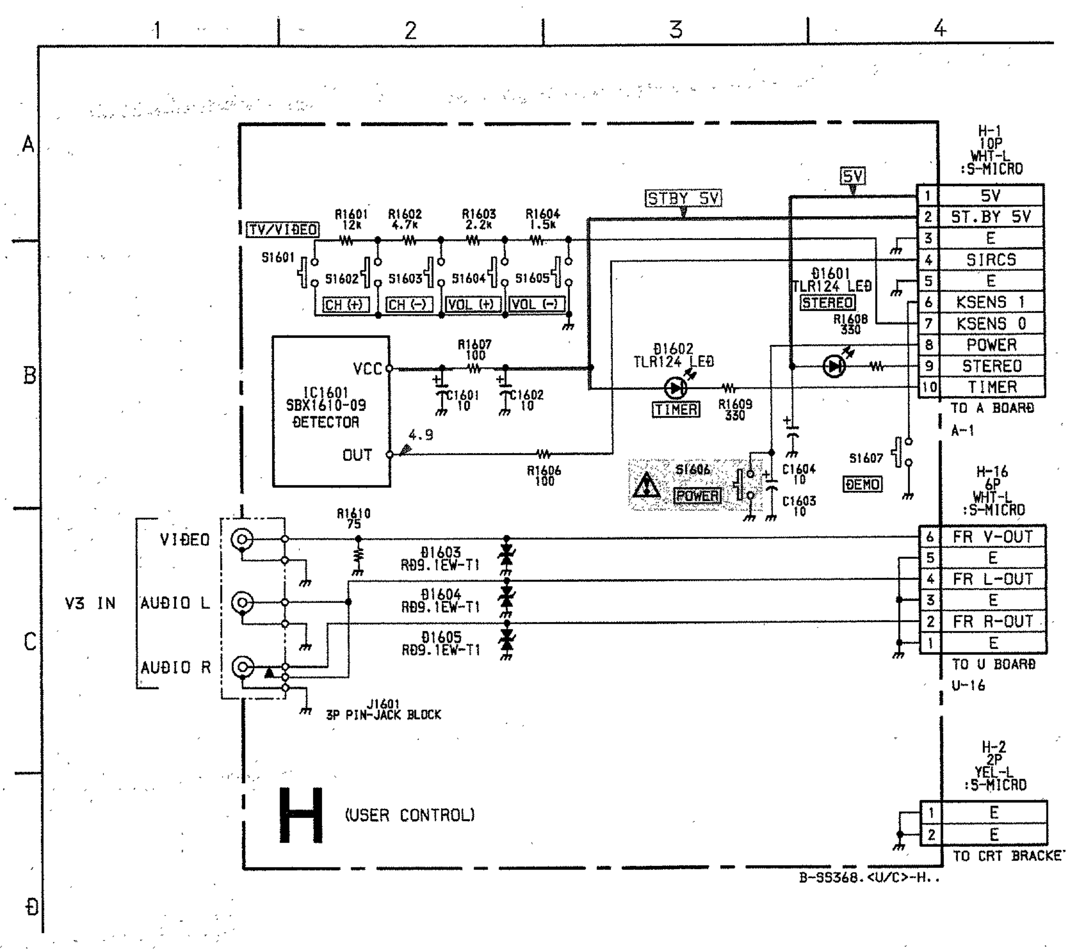
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

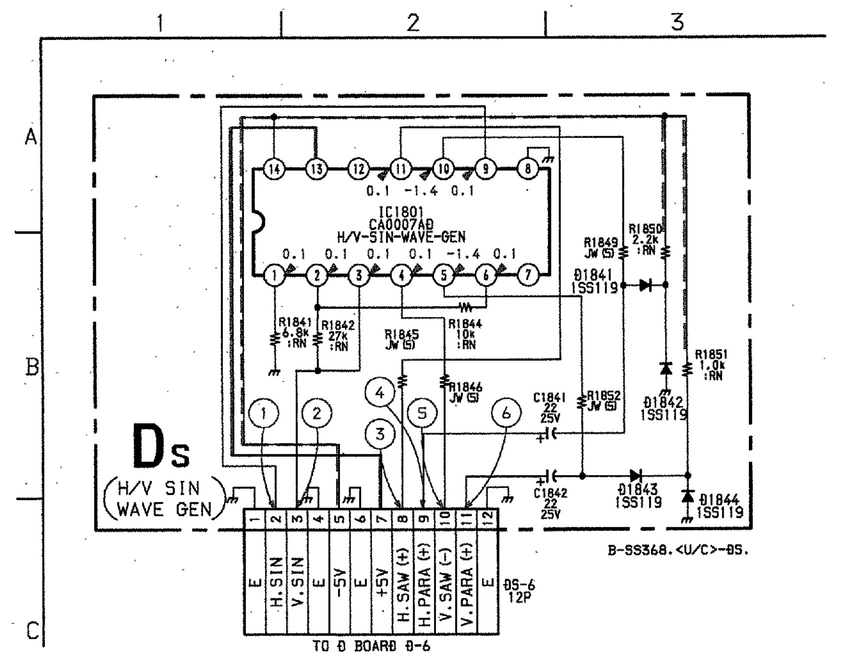
The symbol ⊟ indicate fast operating fuse. Replace only with fuse of same rating as marked.

Note: Les composants identifiés per un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

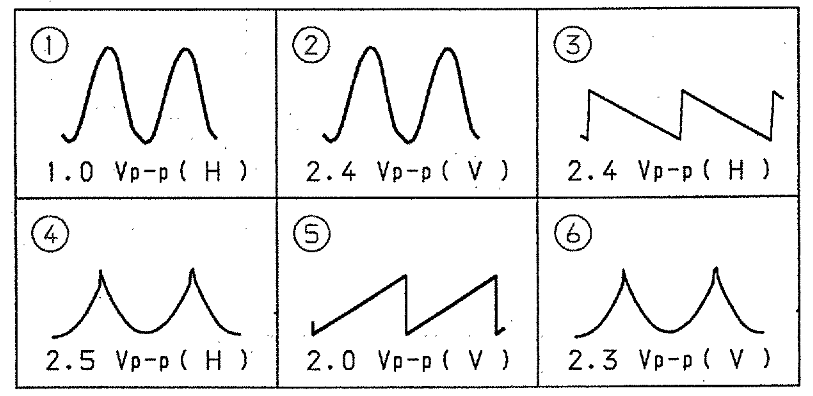
Le symbole ⊟ indique une fusible a action rapide. Doit etre remplacee par une fusible de meme yaleur, comme maque.

Schematic diagrams
← FRAME

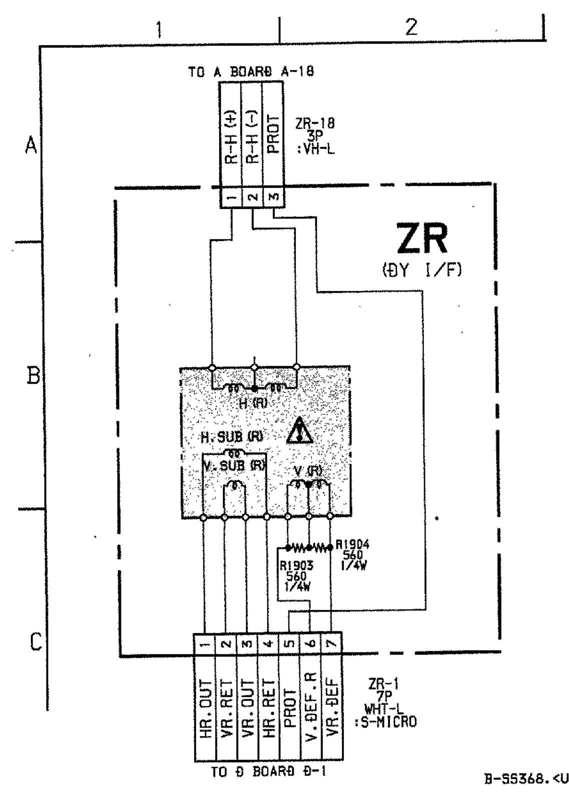

H
(USER CONTROL)
IC1601
SBX1610-09
DETECTOR
TV/VIDEO
CH (+)
CH (-)
VOL (+)
VOL (-)
STBY 5V
5V
TIMER
POWER
STEREO
DEMO
V3 IN
VIDEO
AUDIO L
AUDIO R
J1601
3P PIN-JACK BLOCK
TO A BOARD A-1
TO U BOARD U-16
TO CRT BRACKET
B-SS368.<U/C>-H..

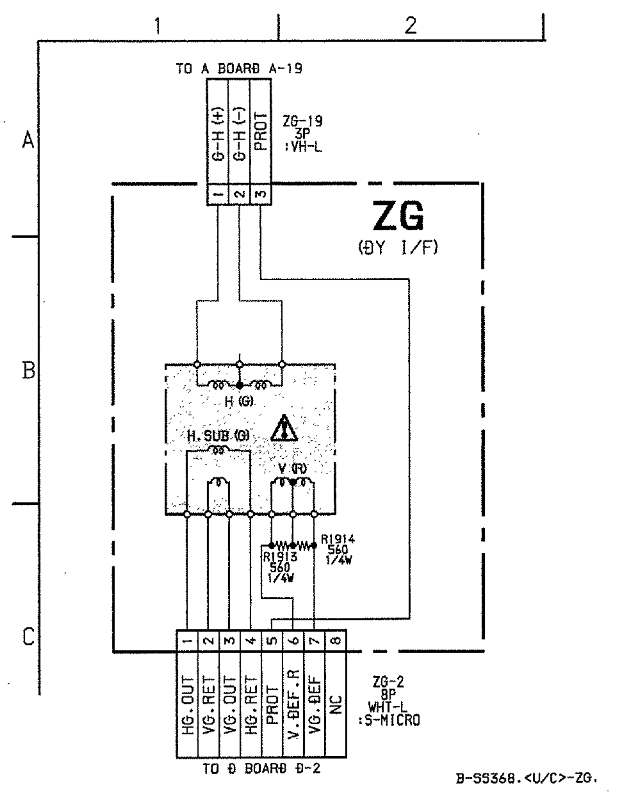

Ds
(H/V SIN WAVE GEN)
IC1801
CXD007AQ
H/V-SIN-WAVE-GEN
H.SIN
V.SIN
E
-5V
E
+5V
H.PARA (+)
H.SAW (+)
V.PARA (-)
V.SAW (+)
DS-6
12P
TO D BOARD D-6
B-SS368.<U/C>-DS.

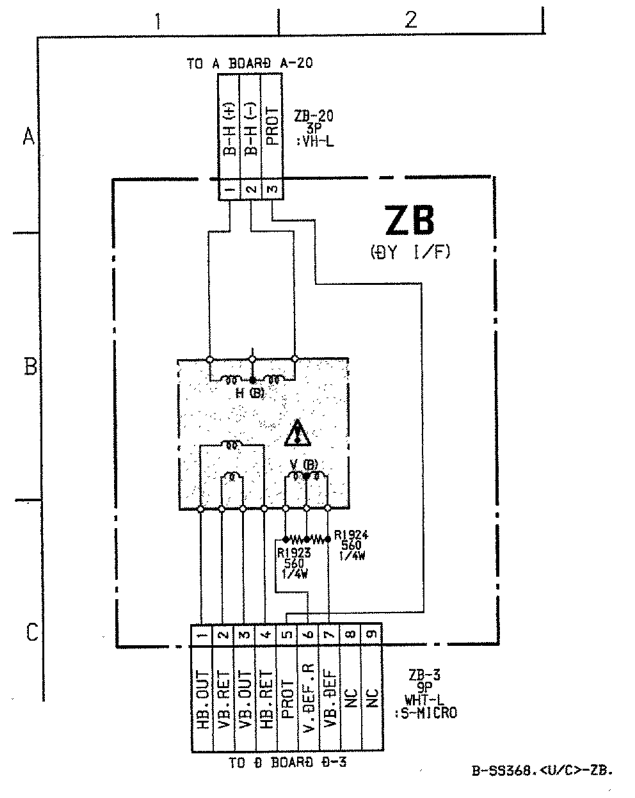
• DS BOARD WAVEFORMS

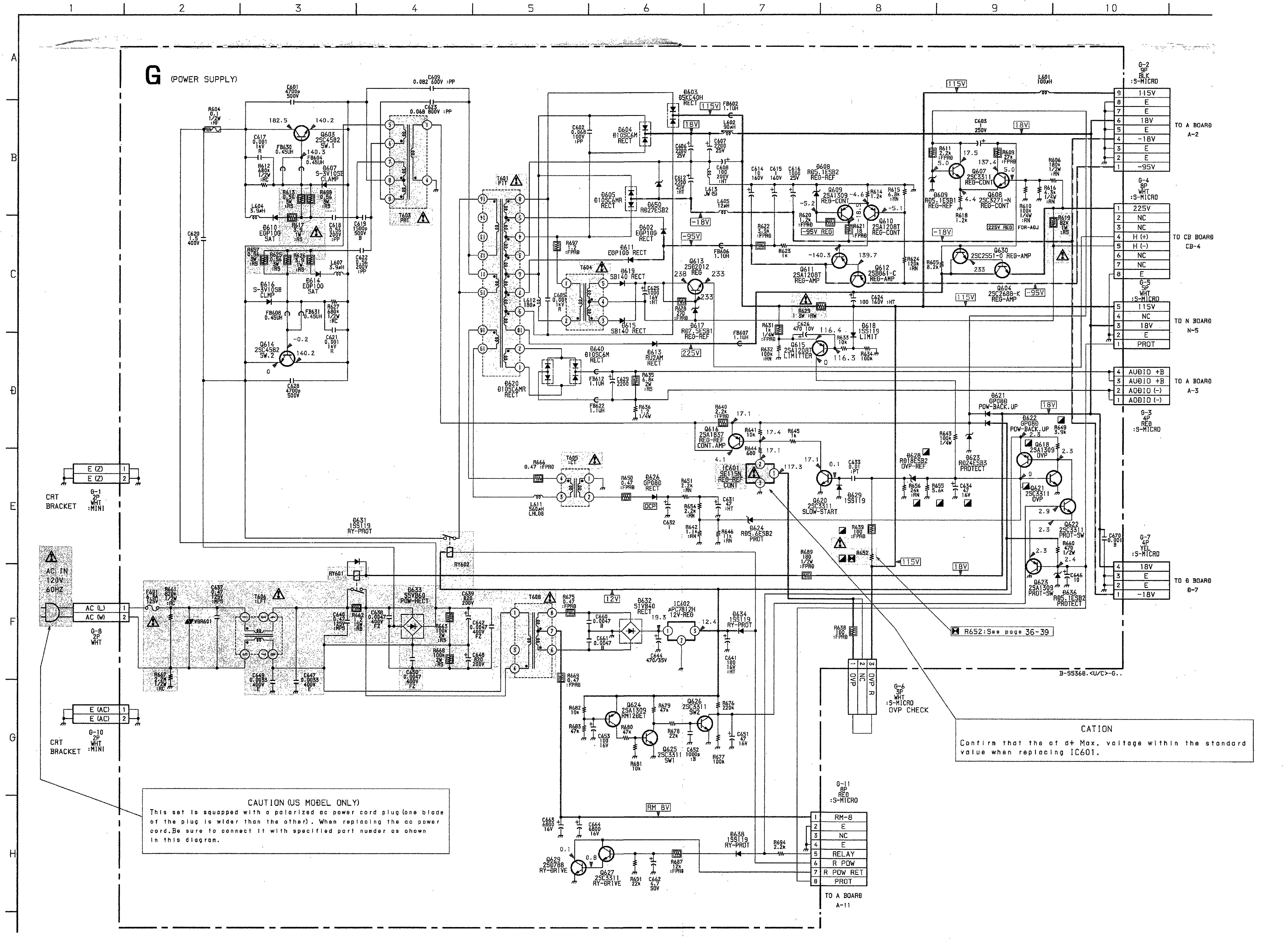


Schematic diagrams
DS G H
ZB ZG ZR boards →


TO A BOARD A-18
ZR
(BY I/F)
H.SUB
V.SUB
ZR-1
7P
WHT-L
:S-MICRO
TO G BOARD G-1
B-SS368.<U/C>-ZR.


TO A BOARD A-19
ZG
(BY I/F)
H.SUB
V.SUB
ZG-2
7P
WHT-L
:S-MICRO
TO G BOARD G-2
B-SS368.<U/C>-ZG.


TO A BOARD A-20
ZB
(BY I/F)
H.SUB
V.SUB
ZB-3
9P
WHT-L
:S-MICRO
TO G BOARD G-3
B-SS368.<U/C>-ZB.

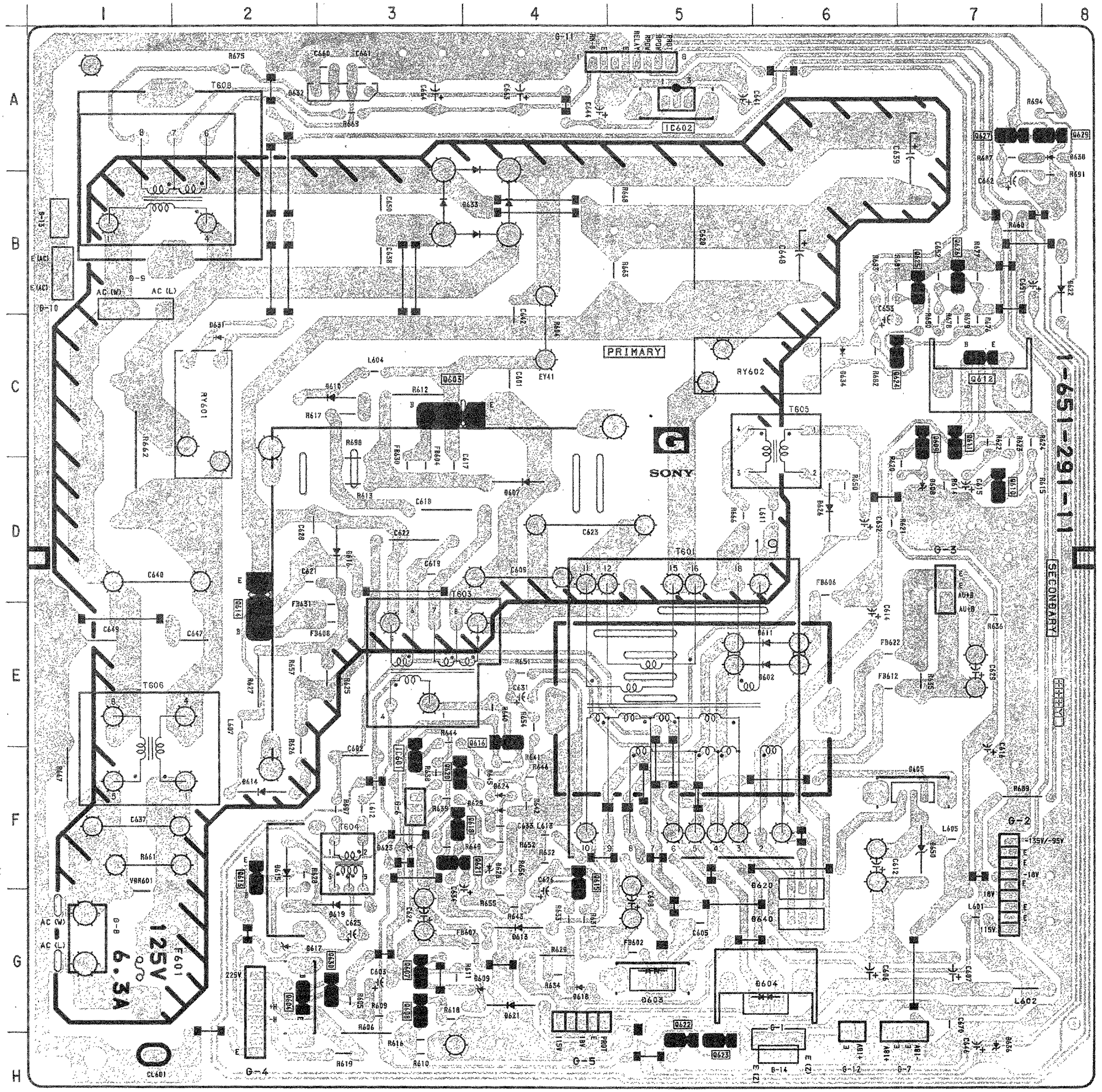

G (POWER SUPPLY)
AC IN 120V 60HZ
CRT BRACKET
TO A BOARD A-2
TO CB BOARD CB-4
TO N BOARD N-5
TO A BOARD A-3
TO G BOARD G-7
TO A BOARD A-11
IC601
IC602
OVP CHECK
R652:See page 36~39
B-SS368.<U/C>-G..

CAUTION (US MODEL ONLY)
This set is squapped with a palarized ac power cord plug (one blade of the plug is wider than the other). When replacing the ac power cord.Be sure to connect it with specified part numder as ahown in this diagram.

CATION
Confirm that the of d+ Max. voltage within the standard value when replacing IC601.

G [POWER SUPPLY] **H** [USER CONTROL] **ZR** [DY 1/F] **ZG** [DY 1/F] **ZB** [DY 1/F] **DS** [H/V SIN, WAVE GEN]

– G BOARD –


1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
PRIMARY
SECONDARY
1-651-291-11
G
SONY
IC601
IC602
T601
T603
T604
T605
T606
T608
RY601
RY602
F601
125V
6.3A
AC (W)
AC (L)

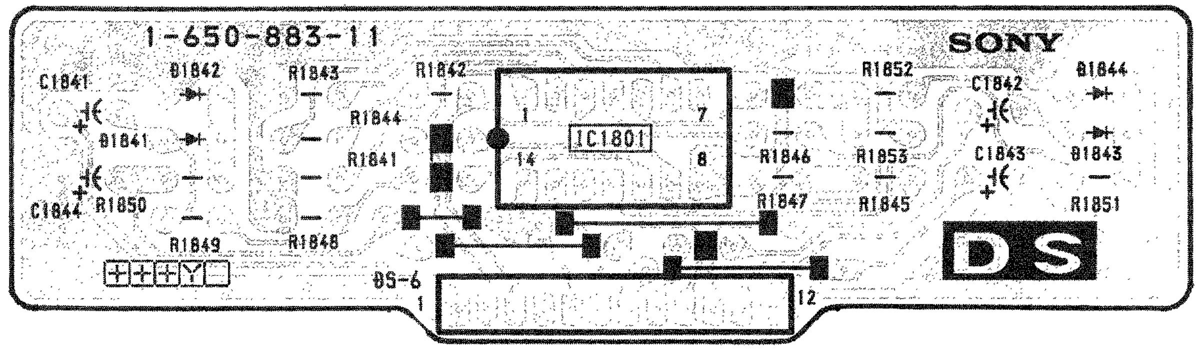
G BOARD

IC	
IC601	F – 3
IC602	A – 5

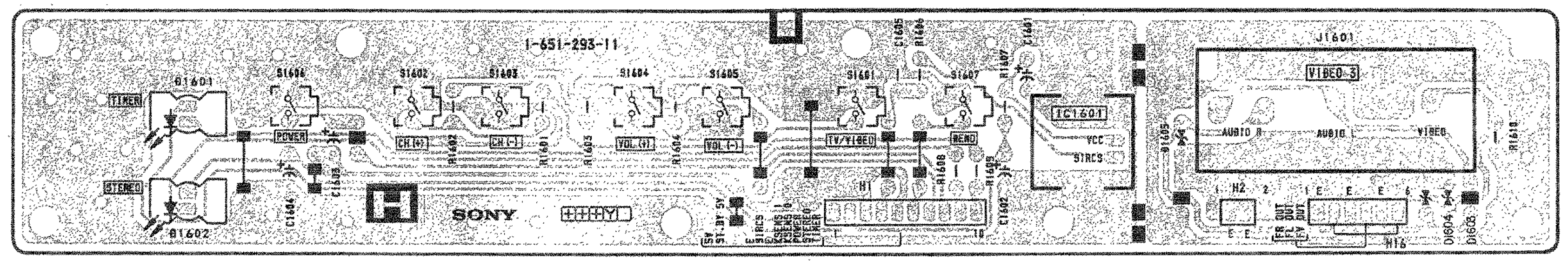
TRANSISTOR	
Q603	C – 3
Q604	G – 2
Q607	G – 3
Q608	G – 3
Q609	C – 7
Q610	D – 7
Q611	C – 7
Q612	C – 7
Q613	F – 2
Q614	E – 2
Q615	F – 4
Q616	E – 4
Q618	F – 3
Q620	F – 3
Q621	F – 3
Q622	G – 5
Q623	G – 5
Q624	C – 6
Q625	B – 7
Q626	B – 7
Q627	A – 7
Q629	A – 7
Q630	G – 3

DIODE	
D602	E – 6
D603	G – 5
D604	G – 6
D605	F – 7
D607	D – 4
D608	D – 7
D609	G – 4
D610	C – 3
D611	E – 6
D613	G – 4
D614	F – 2
D615	F – 3
D616	D – 3
D617	G – 2
D618	G – 4
D619	G – 3
D620	F – 6
D621	G – 4
D622	B – 7
D623	F – 3
D624	F – 4
D626	D – 6
D628	F – 4
D629	F – 4
D631	C – 2
D632	A – 3
D633	B – 3
D634	C – 6
D636	G – 7
D638	A – 7
D640	G – 6
D650	F – 7

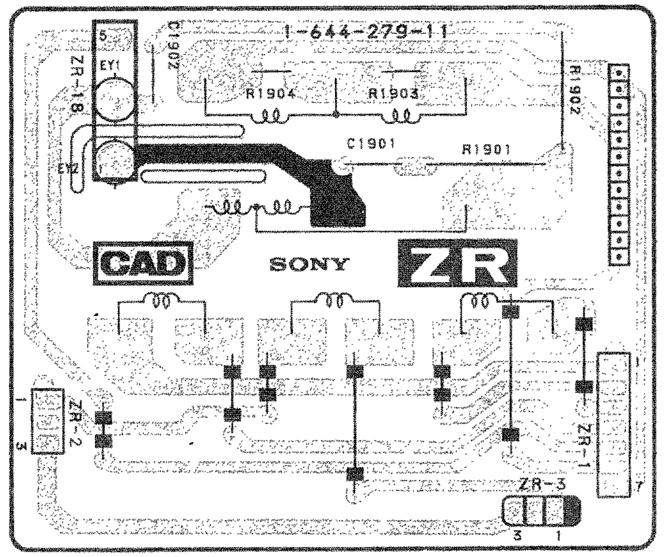
– DS BOARD –


1-650-883-11
SONY
IC1801
C1841
C1842
C1843
C1844
D1841
D1842
D1843
D1844
R1841
R1842
R1843
R1844
R1845
R1846
R1847
R1848
R1849
R1850
R1851
R1852
R1853
DS-6
DS

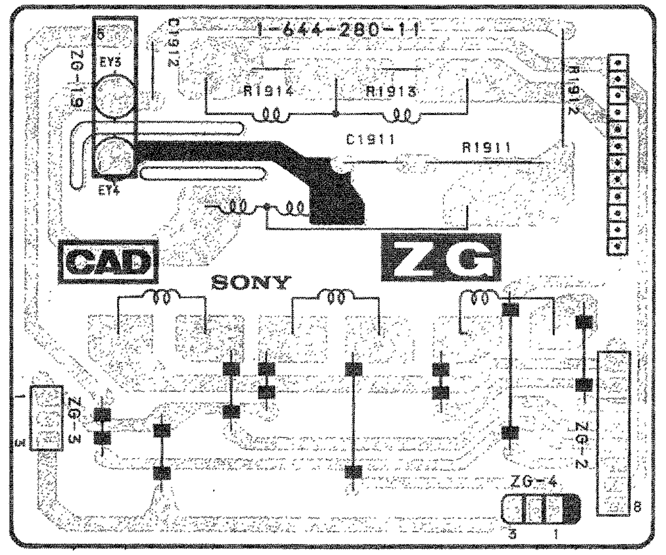
– H BOARD –


1-651-293-11
J1601
VIDEO 3
IC1601
H
SONY

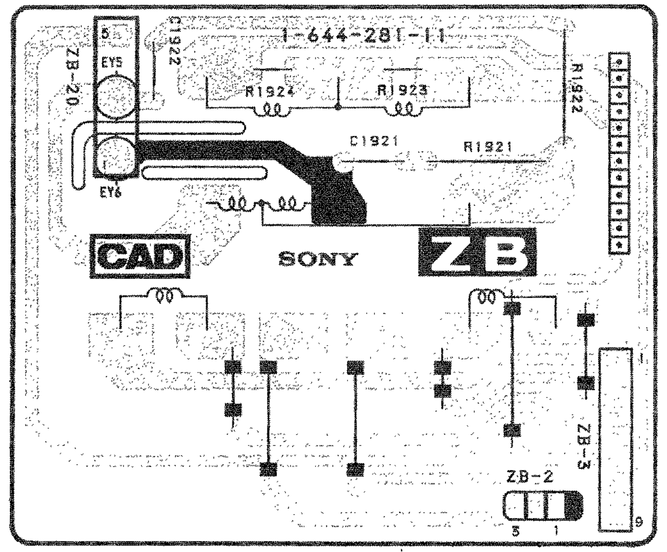
– ZR BOARD –


1-644-279-11
R1904
R1903
C1901
R1901
R1902
CAD
SONY
ZR
ZR-1
ZR-2
ZR-3
ZR-18

– ZG BOARD –

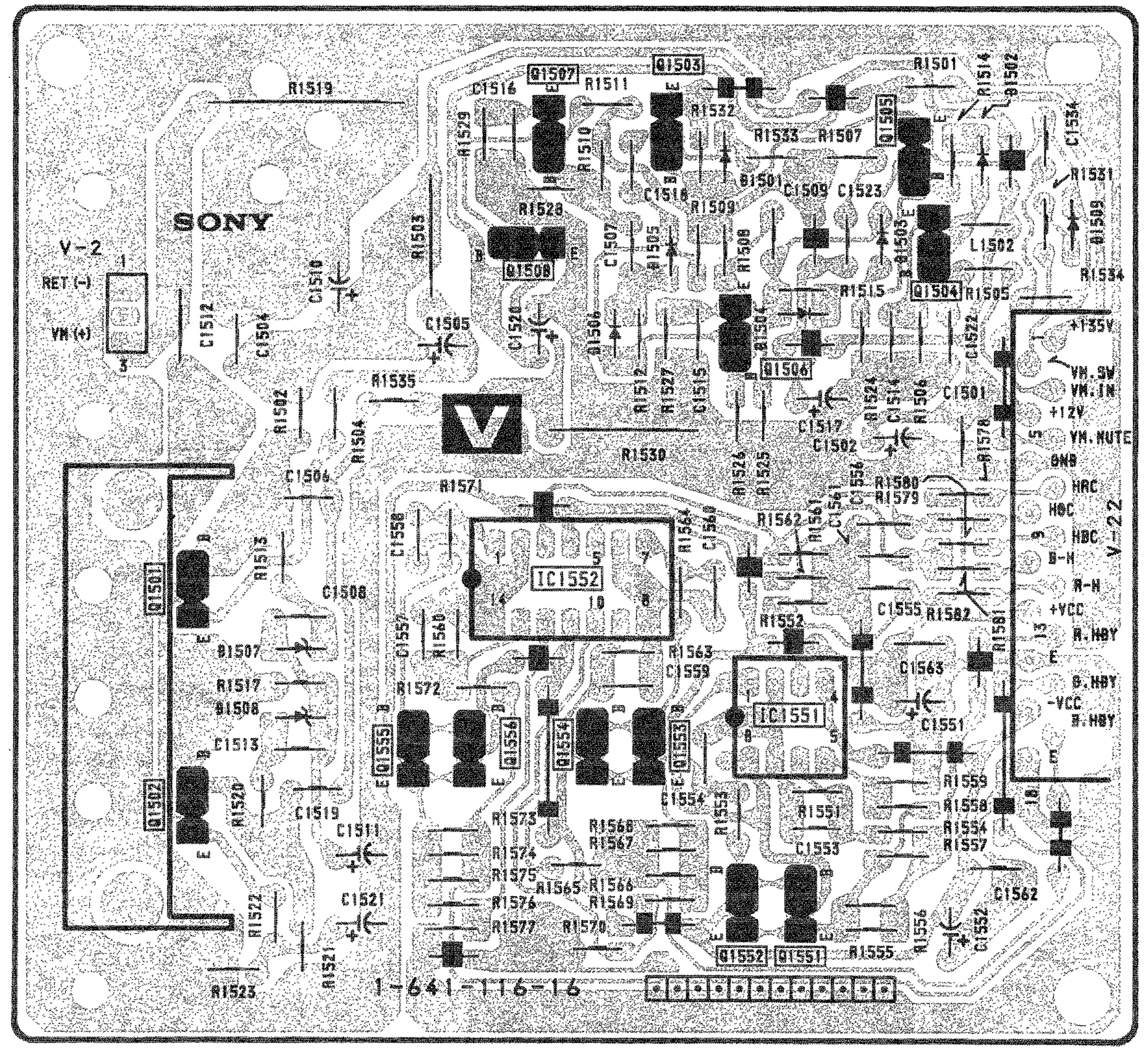

1-644-280-11
R1914
R1913
C1911
R1911
R1912
CAD
SONY
ZG
ZG-2
ZG-3
ZG-4
ZG-19

– ZB BOARD –


1-644-281-11
R1924
R1923
C1921
R1921
R1922
CAD
SONY
ZB
ZB-2
ZB-3
ZB-20

V [R. G. B CENT (H)] **A** [YCJ/SHR/P IN P, MICRO COM./AUDIO SHADING/H. DEF]

– V BOARD –

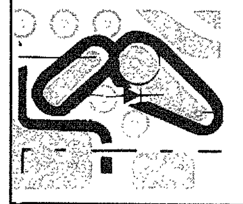


A BOARD

IC	
IC201	D – 5
IC204	D – 6
IC205	E – 1
IC206	B – 6
IC207	A – 2
IC506	G – 9
IC1401	C – 5
IC1601	F – 9

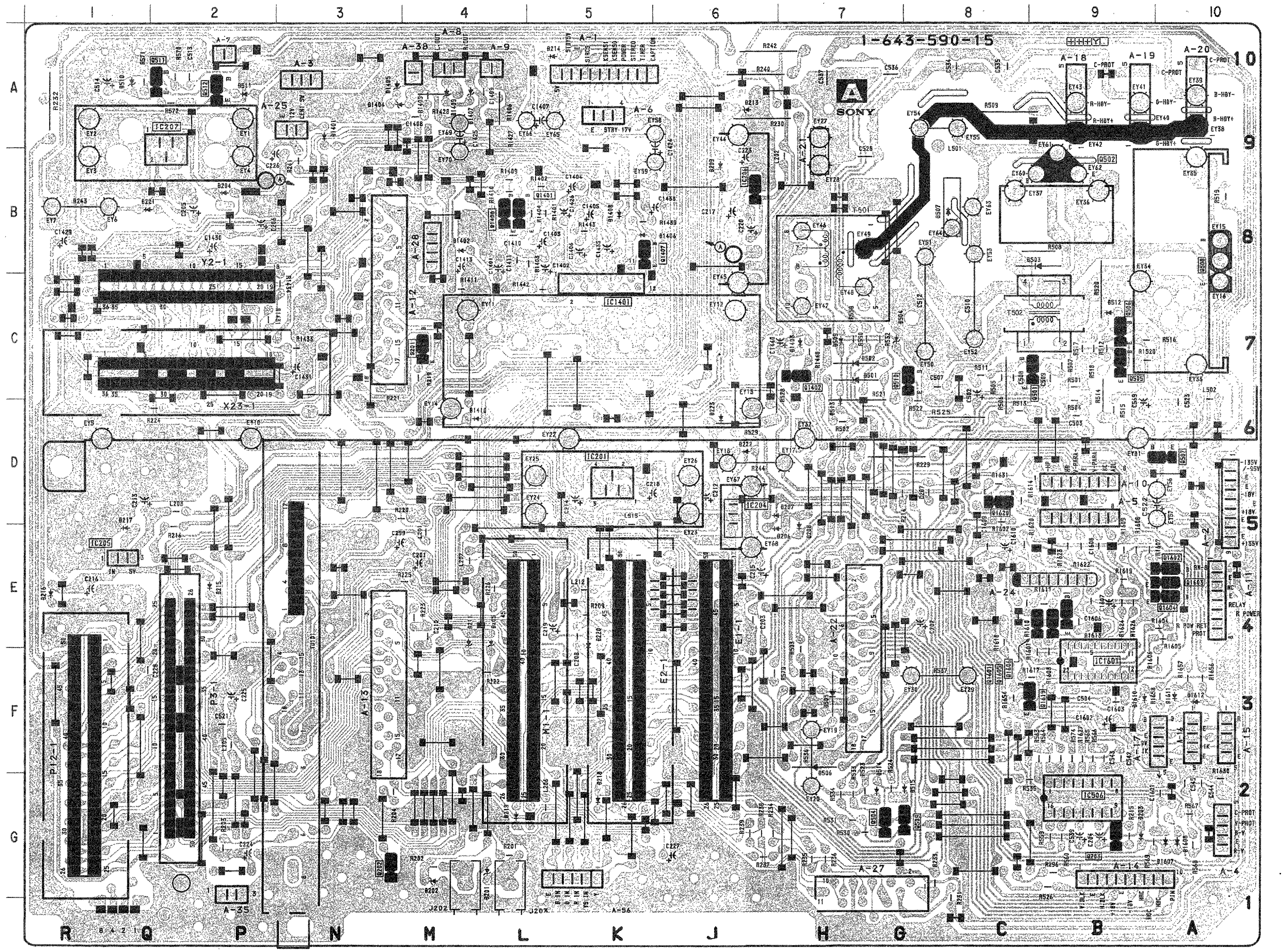
TRANSISTOR	
Q201	C – 4
Q202	G – 3
Q203	G – 9
Q501	C – 9
Q502	B – 9
Q504	G – 7
Q505	C – 9
Q506	C – 9
Q507	D – 10
Q508	B – 10
Q509	G – 8
Q510	C – 8
Q511	A – 2
Q512	A – 2
Q1401	B – 2
Q1402	C – 7
Q1407	B – 5
Q1408	B – 4
Q1601	E – 9
Q1602	E – 10
Q1603	E – 10
Q1604	E – 10
Q1605	E – 9
Q1606	E – 9
Q1620	D – 8

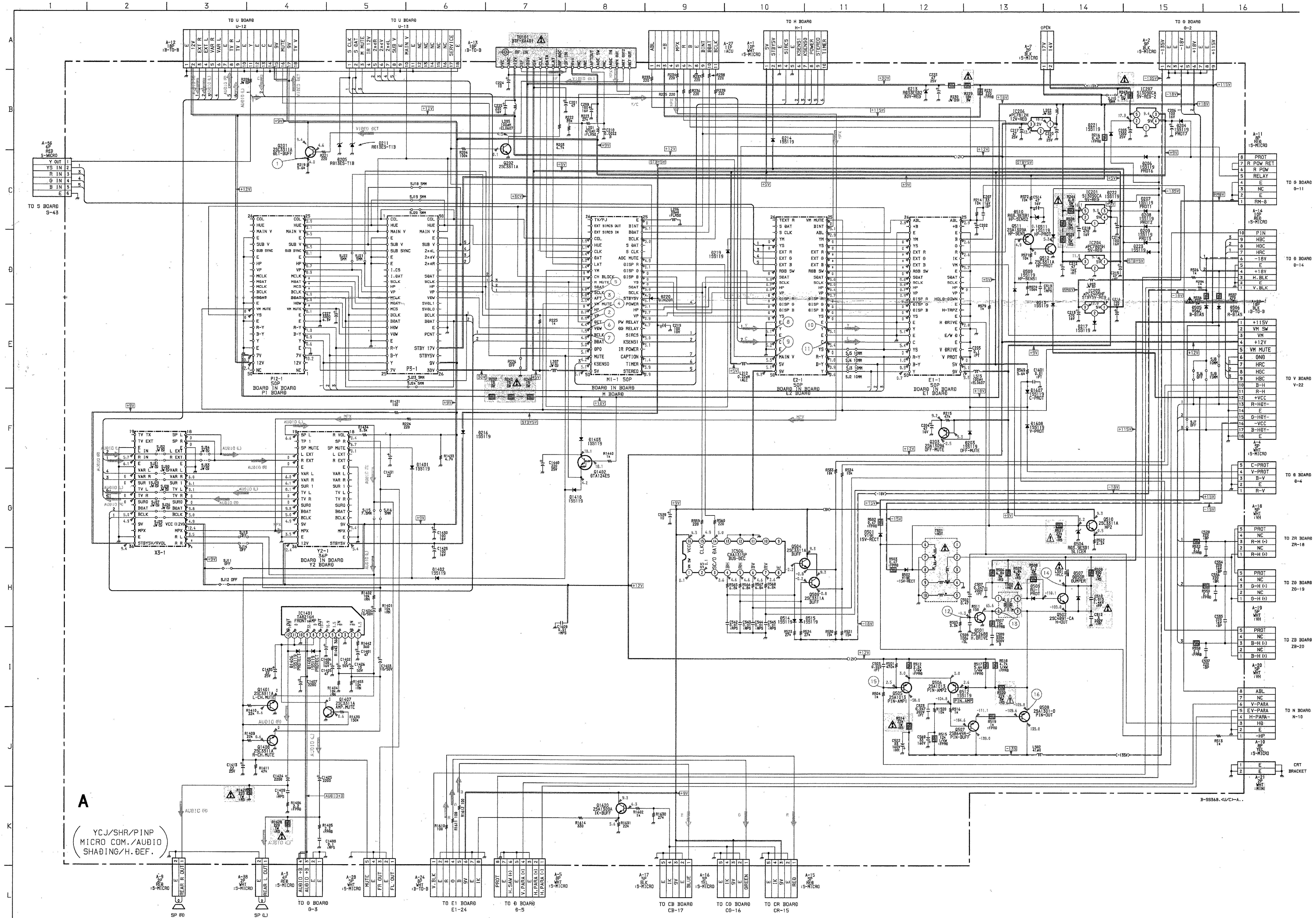
DIODE	
D203	G – 9
D204	B – 2
D205	E – 4
D206	D – 7
D207	D – 7
D208	E – 7
D209	B – 6
D211	E – 4
D213	A – 6
D214	A – 5
D216	E – 1
D217	E – 1
D219	G – 5
D220	E – 5
D221	B – 1
D222	D – 6
D223	D – 6
D501	C – 7
D502	C – 7
D503	B – 9
D504	C – 7
D505	F – 7
D506	F – 7
D507	B – 8
D509	C – 7
D510	A – 1
D511	A′ – 1
D512	C – 9
D513	D – 7
D514	G – 7
D515	G – 8
D1401	A – 3
D1402	B – 4
D1403	C – 7
D1406	B – 5
D1408	B – 5
D1410	D – 4
D1607	G – 10
D1608	G – 10

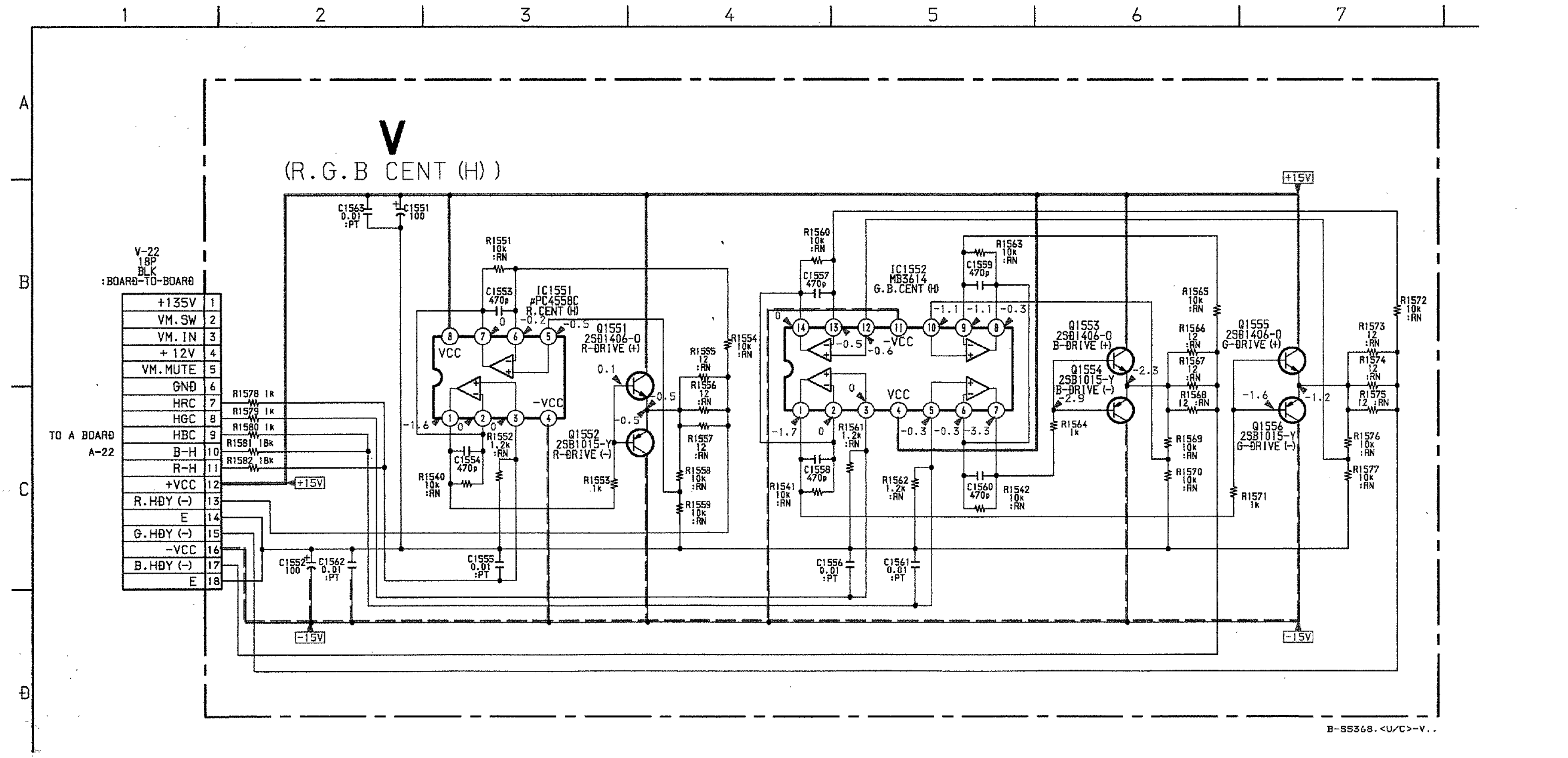


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

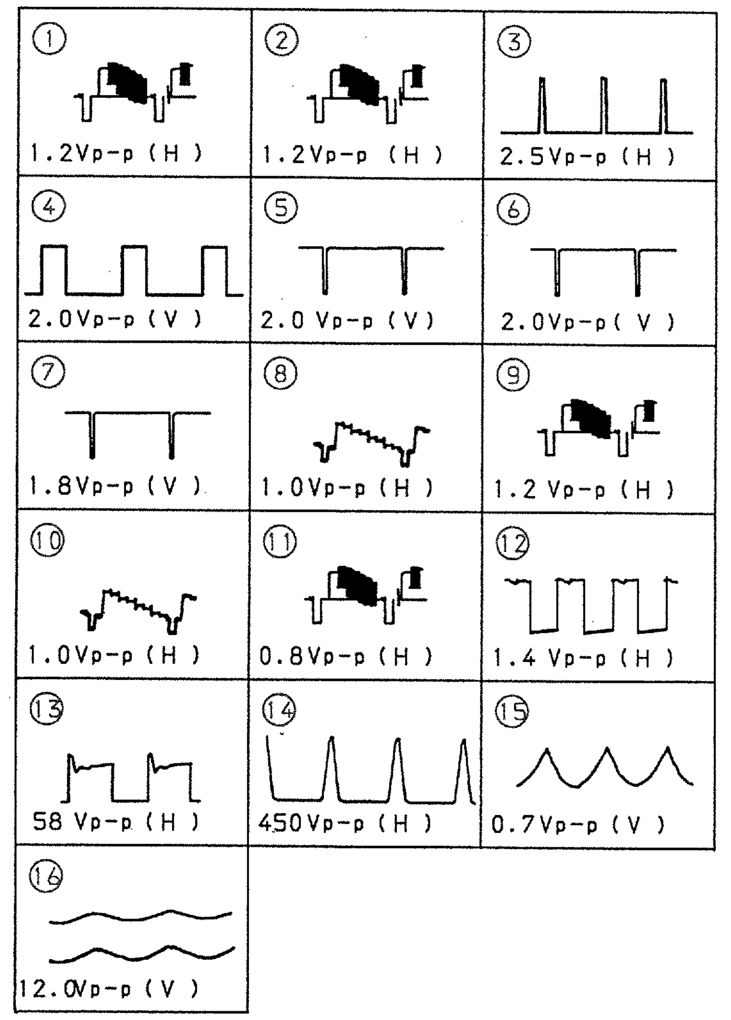
– A BOARD –



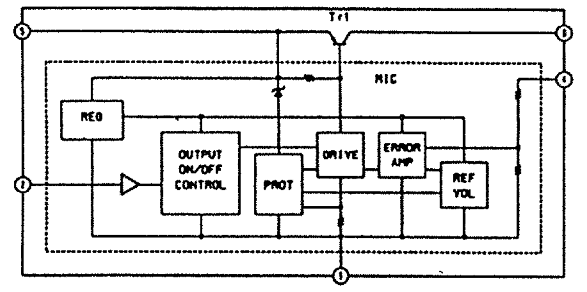

A
YCJ/SHR/PINP
MICRO COM./AUDIO
SHADING/H.DEF.
TO U BOARD U-12
TO U BOARD U-13
TO H BOARD H-1
TO G BOARD G-2
TO S BOARD S-43
TO G BOARD G-11
TO G BOARD G-14
TO V BOARD V-22
TO G BOARD G-4
TO ZR BOARD ZR-18
TO ZG BOARD ZG-19
TO ZB BOARD ZB-20
TO N BOARD N-10
CRT BRACKET
SP (R)
SP (L)
TO G BOARD G-3
TO E1 BOARD E1-24
TO B BOARD B-5
TO CB BOARD CB-17
TO CG BOARD CG-16
TO CR BOARD CR-15
P12-1 50P BOARD IN BOARD P1 BOARD
P3-1
M1-1 50P BOARD IN BOARD M BOARD
E2-1 50P BOARD IN BOARD E2 BOARD
E1-1 50P BOARD IN BOARD E1 BOARD
X3-1
YZ-1 34P BOARD IN BOARD Y2 BOARD
IC1401 TA8216H
IC504 CXA1115P
IC201
IC207
B-55368.<U/C>-A.


V
(R.G.B CENT (H))
TO A BOARD A-22
IC1551
IC1552
B-55368.<U/C>-V.

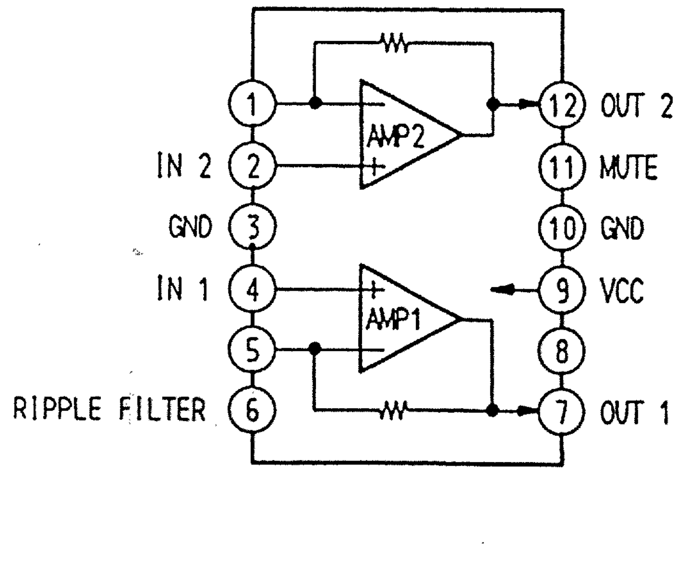
• A BOARD WAVEFORMS


①
1.2Vp-p (H)
②
1.2Vp-p (H)
③
2.5Vp-p (H)
④
2.0Vp-p (V)
⑤
2.0 Vp-p (V)
⑥
2.0Vp-p (V)
⑦
1.8Vp-p (V)
⑧
1.0Vp-p (H)
⑨
1.2 Vp-p (H)
⑩
1.0Vp-p (H)
⑪
0.8Vp-p (H)
⑫
1.4 Vp-p (H)
⑬
58 Vp-p (H)
⑭
450Vp-p (H)
⑮
0.7Vp-p (V)
⑯
12.0Vp-p (V)

A BOARD IC201, 207 SI-3090CA

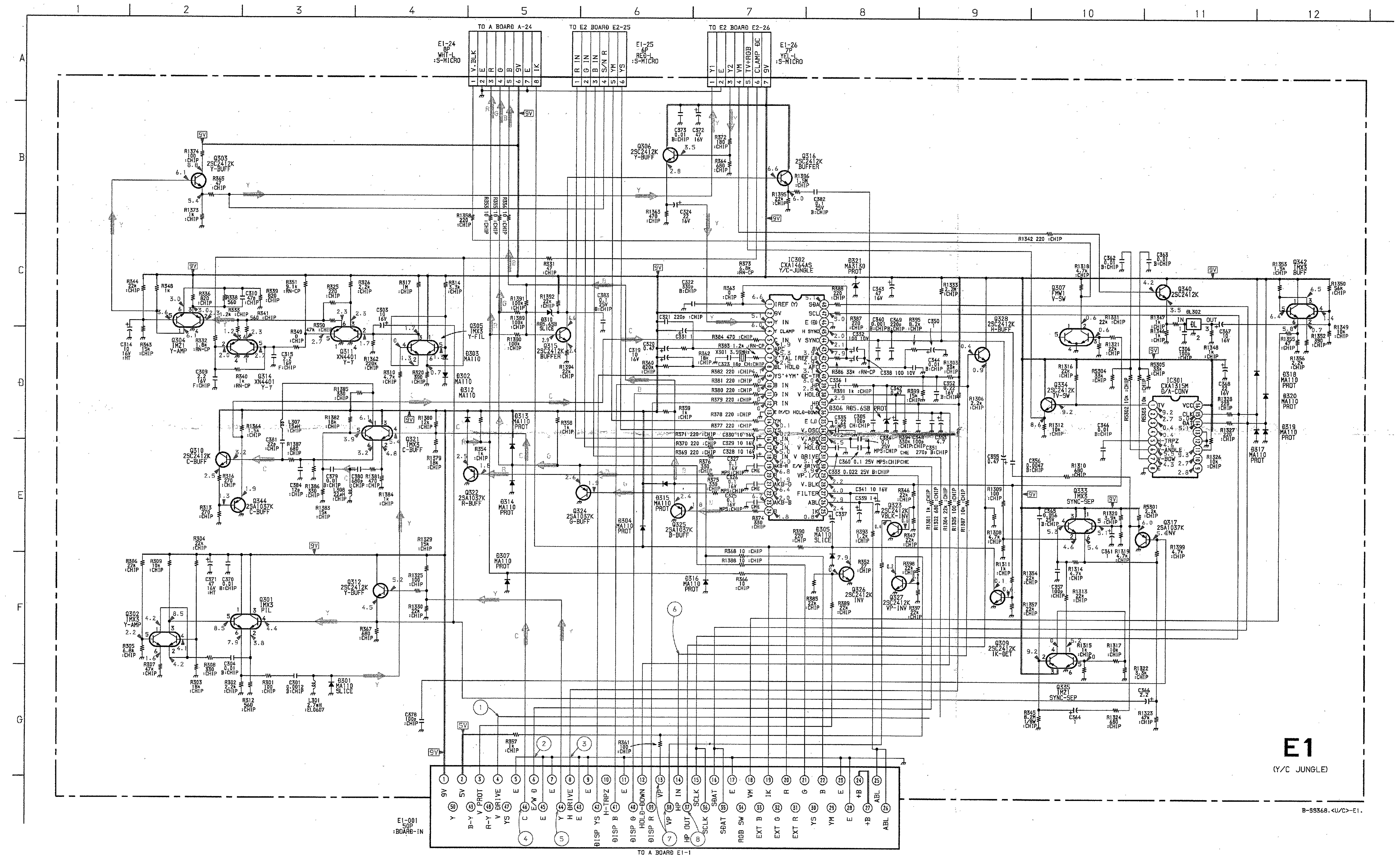

OUTPUT ON/OFF CONTROL
PROT
DRIVE
ERROR AMP
REF VOL

A BOARD IC401 TA8216H

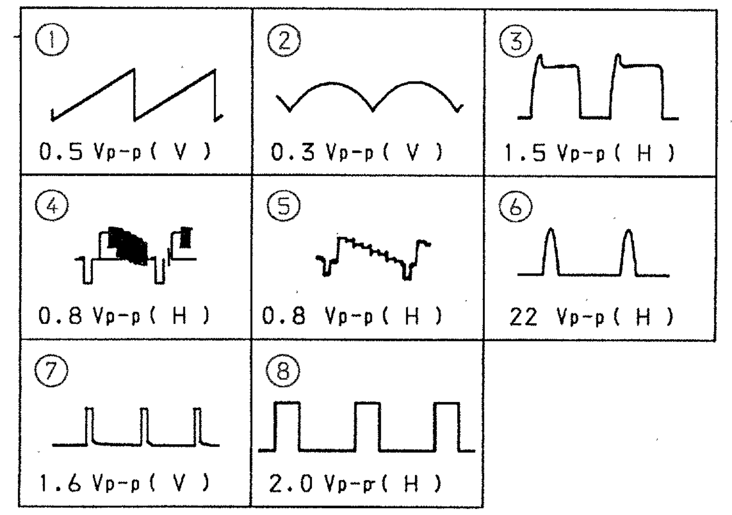

1
IN 2
2
GND
3
IN 1
4
5
RIPPLE FILTER
6
AMP2
AMP1
12 OUT 2
11 MUTE
10 GND
9 VCC
8
7 OUT 1

Schematic diagrams
← A V boards

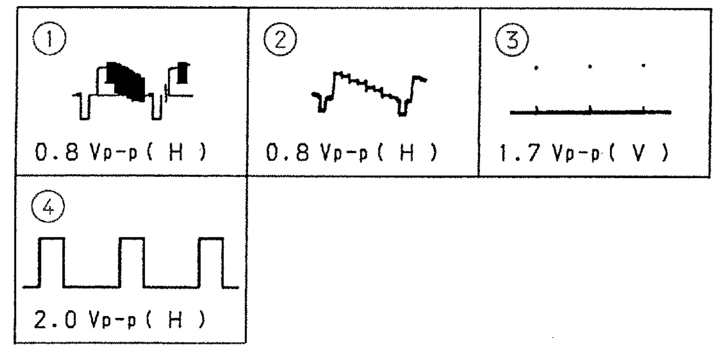
Schematic diagrams
E1 E2 boards →

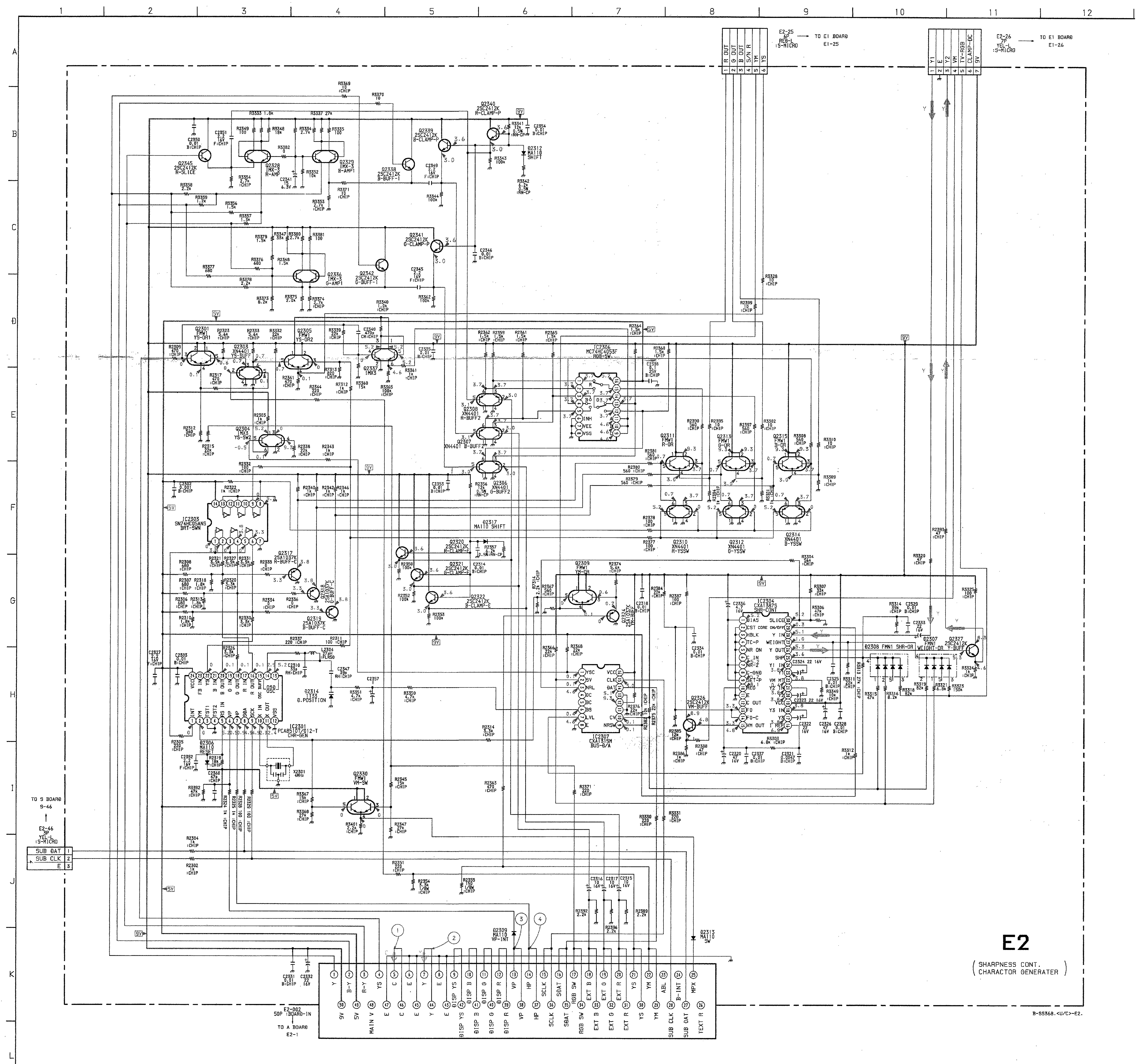

E1
(Y/C JUNGLE)
B-SS368.<U/C>-E1.
TO A BOARD A-24
TO E2 BOARD E2-25
TO E2 BOARD E2-26
IC502 CXA1464AS Y/C JUNGLE
E1-001 50P :BOARD-IN
TO A BOARD E1-1

• **E1 BOARD WAVEFORMS**



• **E2 BOARD WAVEFORMS**




E2
(SHARPNESS CONT. CHARACTOR GENERATER)
B-SS368.<U/C>-E2.
E2-25 TO E1 BOARD E1-25
E2-26 TO E1 BOARD E1-26
TO S BOARD S-46
SUB DAT
SUB CLK
E2-001 50P :BOARD-IN
TO A BOARD E2-1

E1 [Y/C JUNGLE] **E2** [SHARPNESS CONT., CHARACTOR GENERATER]

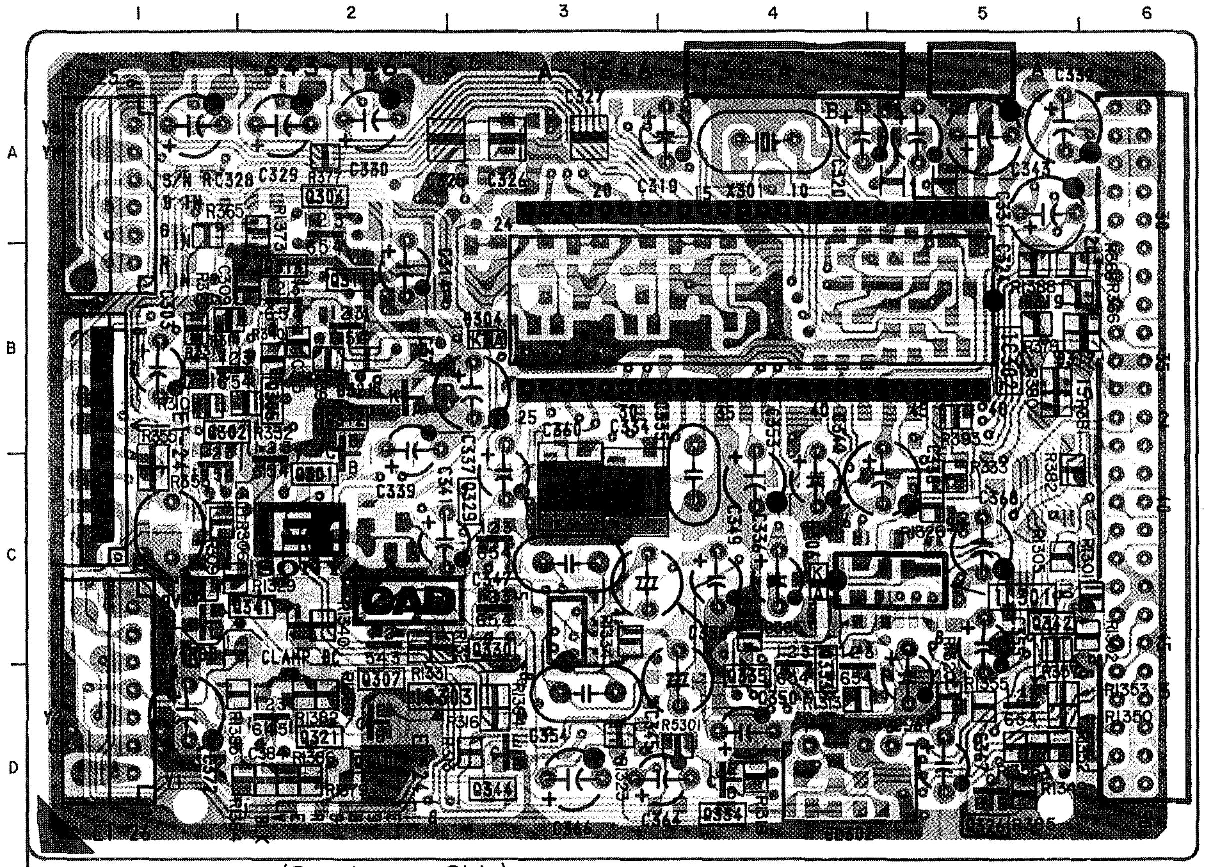
E1 BOARD

IC	
IC301	C-5
IC302	B-4, G-4
TRANSISTOR	
Q301	C-2
Q302	C-1
Q303	G-1
Q304	A-2
Q305	B-1
Q306	H-3
Q307	C-2
Q309	F-2
Q310	D-2
Q311	B-2
Q312	B-2
Q314	B-2
Q315	G-5
Q316	G-5
Q317	E-3
Q321	D-2
Q322	G-4
Q323	F-3
Q324	G-3
Q325	G-3
Q326	D-5
Q327	G-3
Q328	F-5
Q333	D-4
Q334	D-4
Q335	D-4
Q340	E-4
Q342	D-5
Q344	D-3
DIODE	
D301	F-1
D302	G-1
D303	G-1
D304	B-3
D305	F-3
D306	C-4
D307	G-4
D310	G-4
D312	G-4
D313	G-3
D314	G-3
D315	G-2
D316	G-3
D317	B-5
D318	F-5
D319	B-5
D320	G-5
D321	B-2

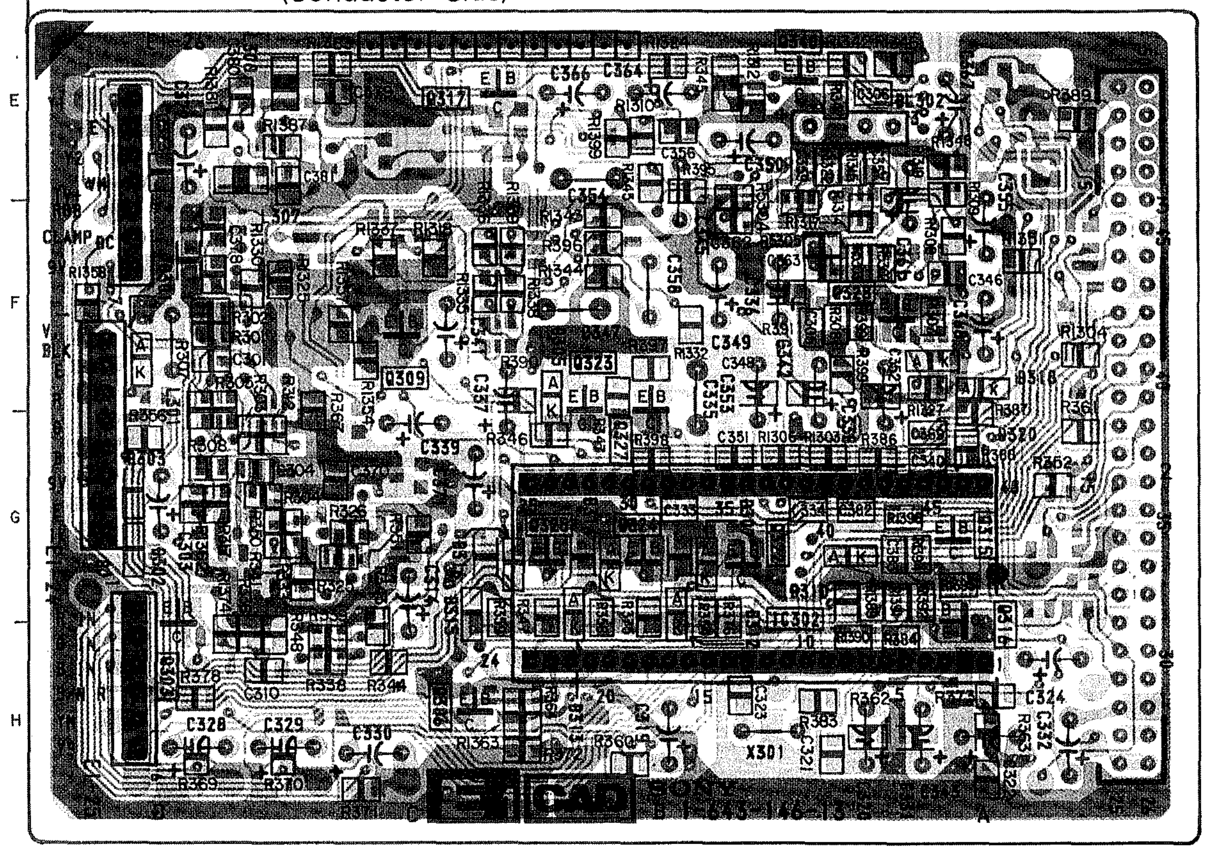
Note :

- ▒ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

– E1 BOARD – ⟨Component Side⟩



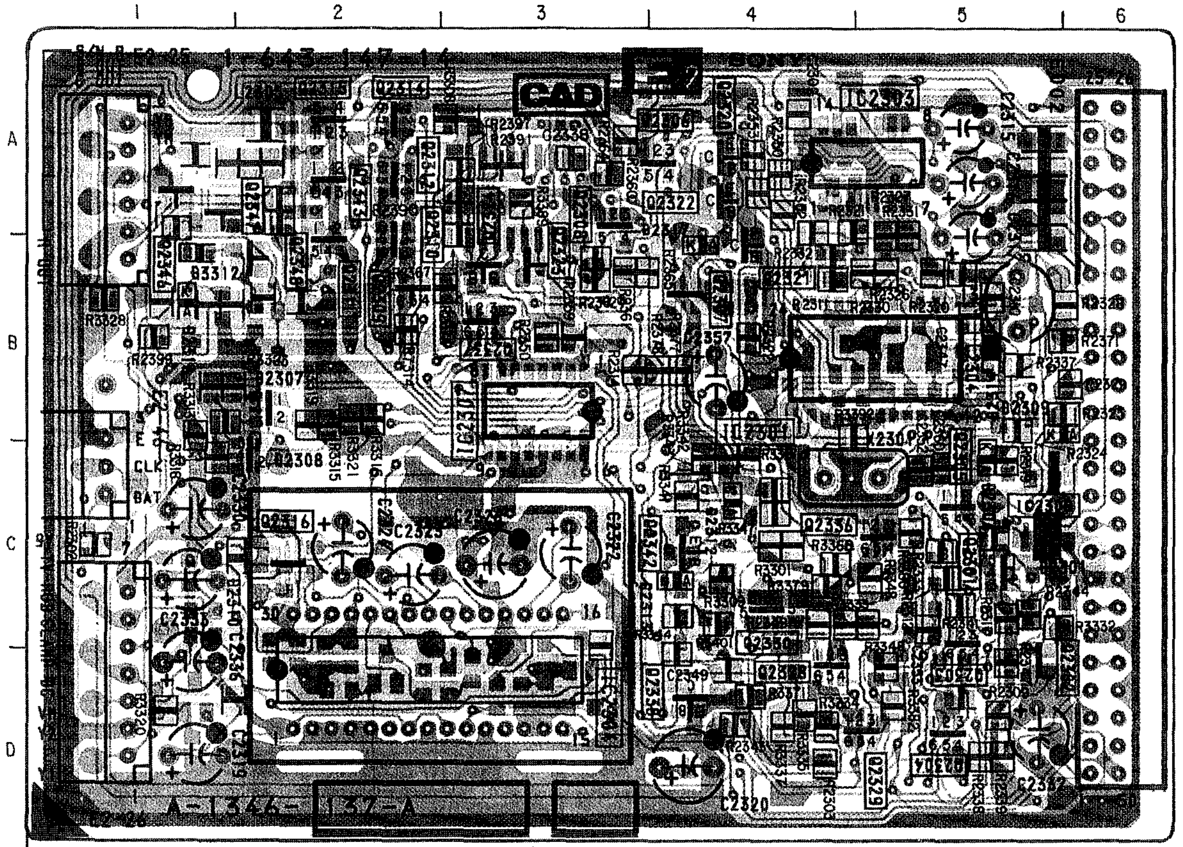
⟨Conductor Side⟩



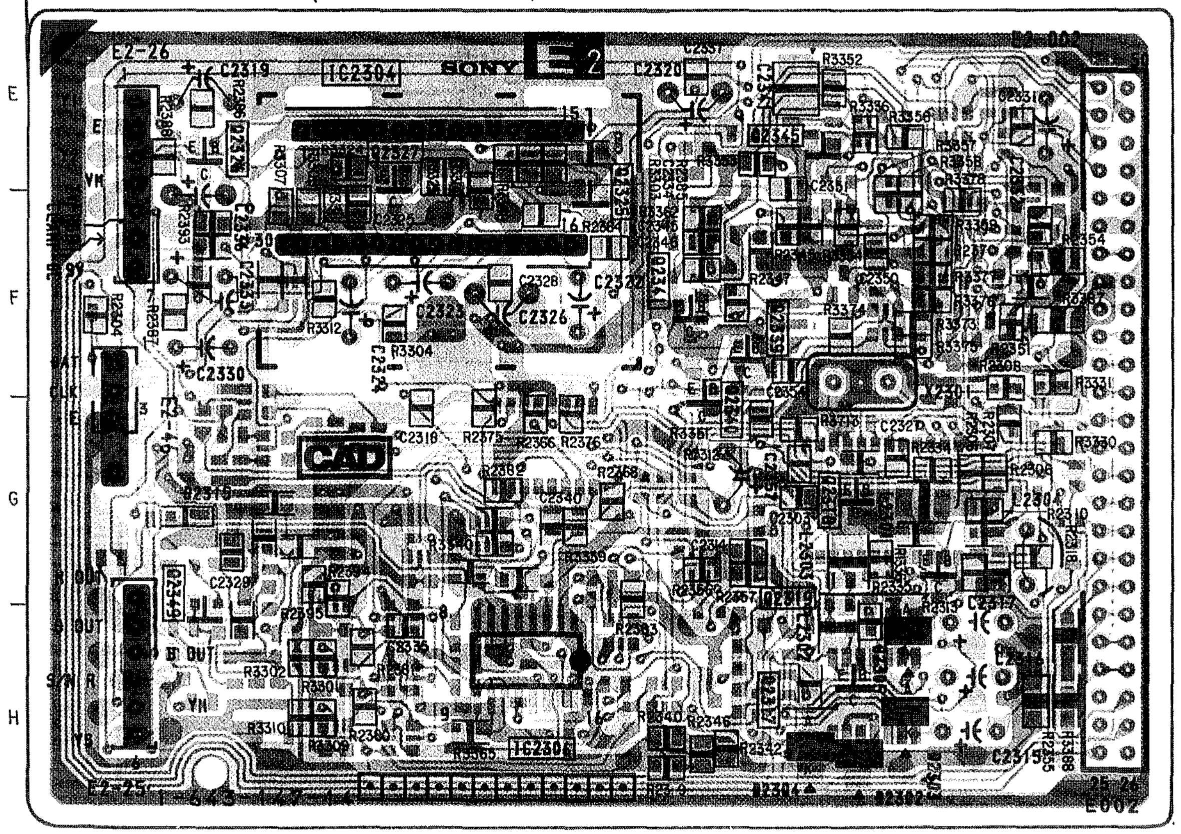
Note :

- ▒ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

– E2 BOARD – ⟨Component Side⟩



⟨Conductor Side⟩



E2 BOARD

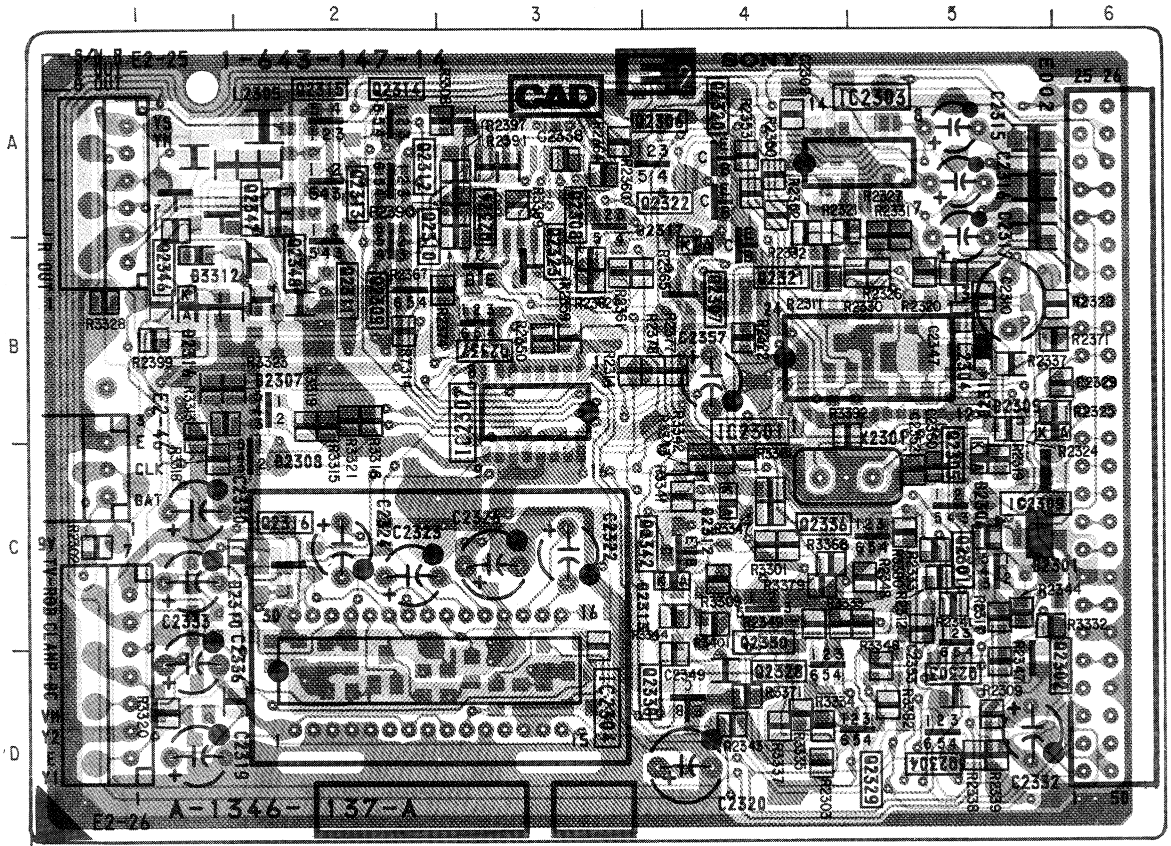
IC	
IC2301	B-4
IC2303	A-5
IC2304	D-3, E-2
IC2306	H-3
IC2307	B-3
TRANSISTOR	
Q2301	C-5
Q2303	C-5
Q2304	D-5
Q2305	C-5
Q2306	A-3
Q2307	B-4
Q2308	A-3
Q2309	B-2
Q2310	A-2
Q2311	A-2
Q2312	A-2
Q2313	A-2
Q2314	A-2
Q2315	A-2
Q2317	H-4
Q2318	G-4
Q2319	G-5
Q2320	A-4
Q2321	A-4
Q2322	A-4
Q2324	B-3
Q2326	E-1
Q2327	E-2
Q2330	C-4
Q2337	B-3
Q2339	F-4
Q2340	F-4
Q2341	F-4
DIODE	
D2306	C-5
D2307	B-2
D2308	B-2
D2309	B-5
D2312	C-4
D2313	C-4
D2314	B-5
D2317	A-4

ables seeing.

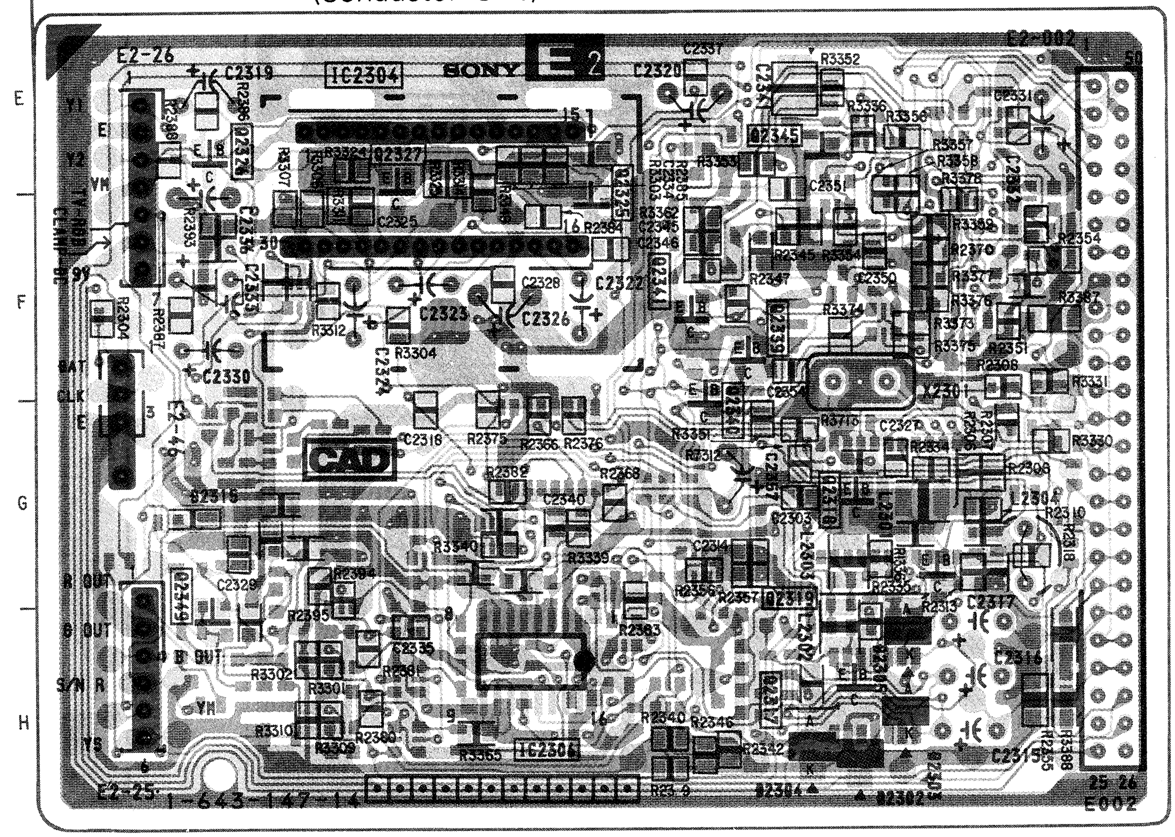
Note :

- ▨ : Pattern from the side which enables seeing.
- ▩ : Pattern of the rear side.

– E2 BOARD – ⟨Component Side⟩


1
2
3
4
5
6
A
B
C
D
E2-25
1-643-147-14
CAD
E2
SONY
IC2303
IC2301
IC2307
IC2309
IC2304
X2301
E002
25 26
1 50
E2-26
A-1346-137-A
R OUT
TV-RGB CLAMP-BE
BAT
CLK
E
Y1
Y2
YM

⟨Conductor Side⟩


E
F
G
H
E2-26
IC2304
SONY
E2
E2-002
1 50
CAD
IC2306
X2301
E2-25
1-643-147-14
25 26
E002
Y1
Y2
YM
TV-RGB CLAMP-BE
9V
BAT
CLK
E
R OUT
B OUT
S/N R
YS

E2 BOARD

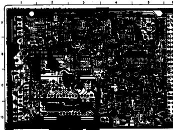
IC	
IC2301	B – 4
IC2303	A – 5
IC2304	D – 3, E – 2
IC2306	H – 3
IC2307	B – 3
TRANSISTOR	
Q2301	C – 5
Q2303	C – 5
Q2304	D – 5
Q2305	C – 5
Q2306	A – 3
Q2307	B – 4
Q2308	A – 3
Q2309	B – 2
Q2310	A – 2
Q2311	A – 2
Q2312	A – 2
Q2313	A – 2
Q2314	A – 2
Q2315	A – 2
Q2317	H – 4
Q2318	G – 4
Q2319	G – 5
Q2320	A – 4
Q2321	A – 4
Q2322	A – 4
Q2324	B – 3
Q2326	E – 1
Q2327	E – 2
Q2330	C – 4
Q2337	B – 3
Q2339	F – 4
Q2340	F – 4
Q2341	F – 4
DIODE	
D2306	C – 5
D2307	B – 2
D2308	B – 2
D2309	B – 5
D2312	C – 4
D2313	C – 4
D2314	B – 5
D2317	A – 4

ables seeing.

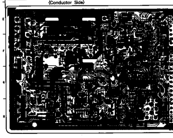
Note :

- ▇ : Pattern from the side which enables seeing.
- ▇ : Pattern of the rear side.

– E2 BOARD – (Component Side)



(Conductor Side)



E2 BOARD

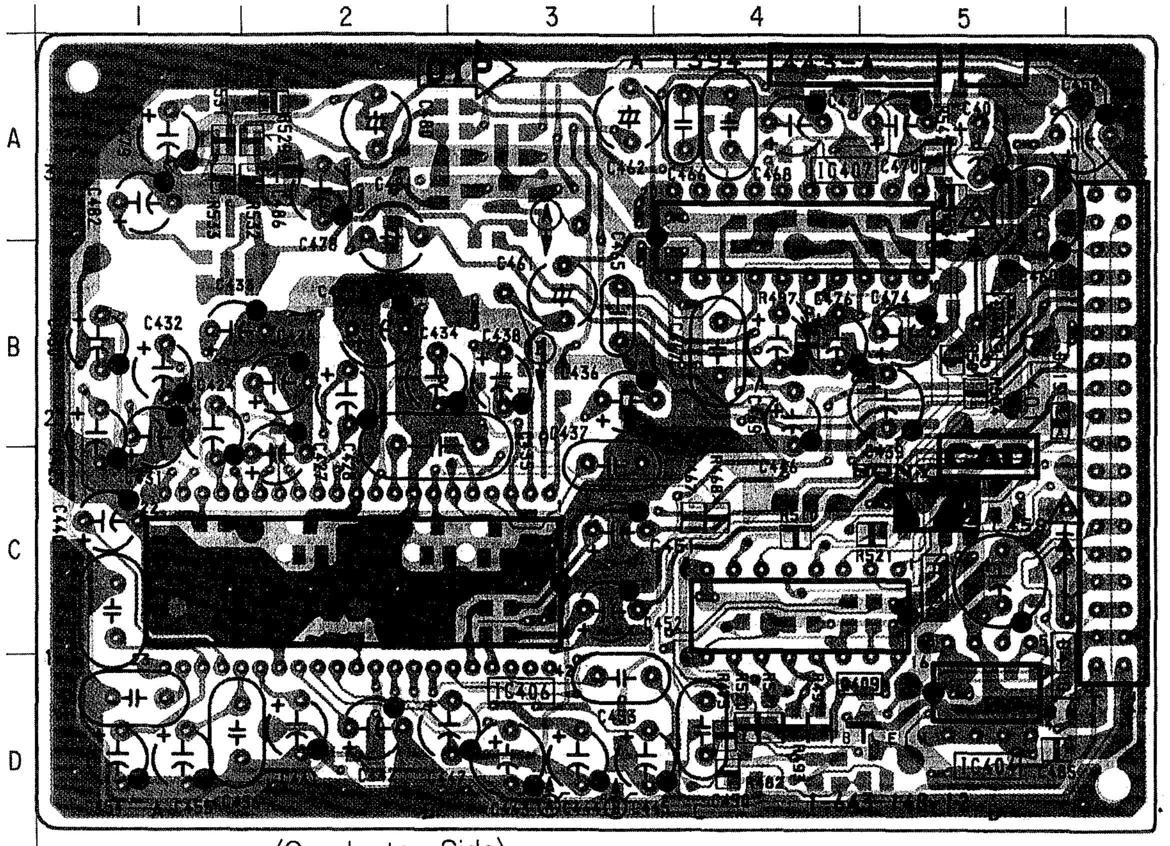
IC	
IC2301	B-4
IC2303	A-5
IC2304	D-E, C-2
IC2306	H-3
IC2307	E-2
TRANSISTOR	
Q2301	C-5
Q2303	C-5
Q2304	C-5
Q2305	C-5
Q2306	A-5
Q2307	E-4
Q2308	A-2
Q2309	E-2
Q2310	A-2
Q2311	A-2
Q2312	A-2
Q2313	A-2
Q2314	A-2
Q2316	A-2
Q2317	H-4
Q2318	G-4
Q2319	G-5
Q2320	A-4
Q2321	A-4
Q2322	A-4
Q2324	B-3
Q2326	E-1
Q2327	E-2
Q2330	D-4
Q2331	B-3
Q2339	F-4
Q2340	F-4
Q2341	F-4
DIODE	
D2306	C-5
D2307	B-2
D2308	B-2
D2309	F-5
D2312	E-4
D2313	E-4
D2314	B-5
D2317	A-4

Y2 [MTS-DECORDER, NVM, AUDIO CON.] UT [IN/OUT TERMINAL]

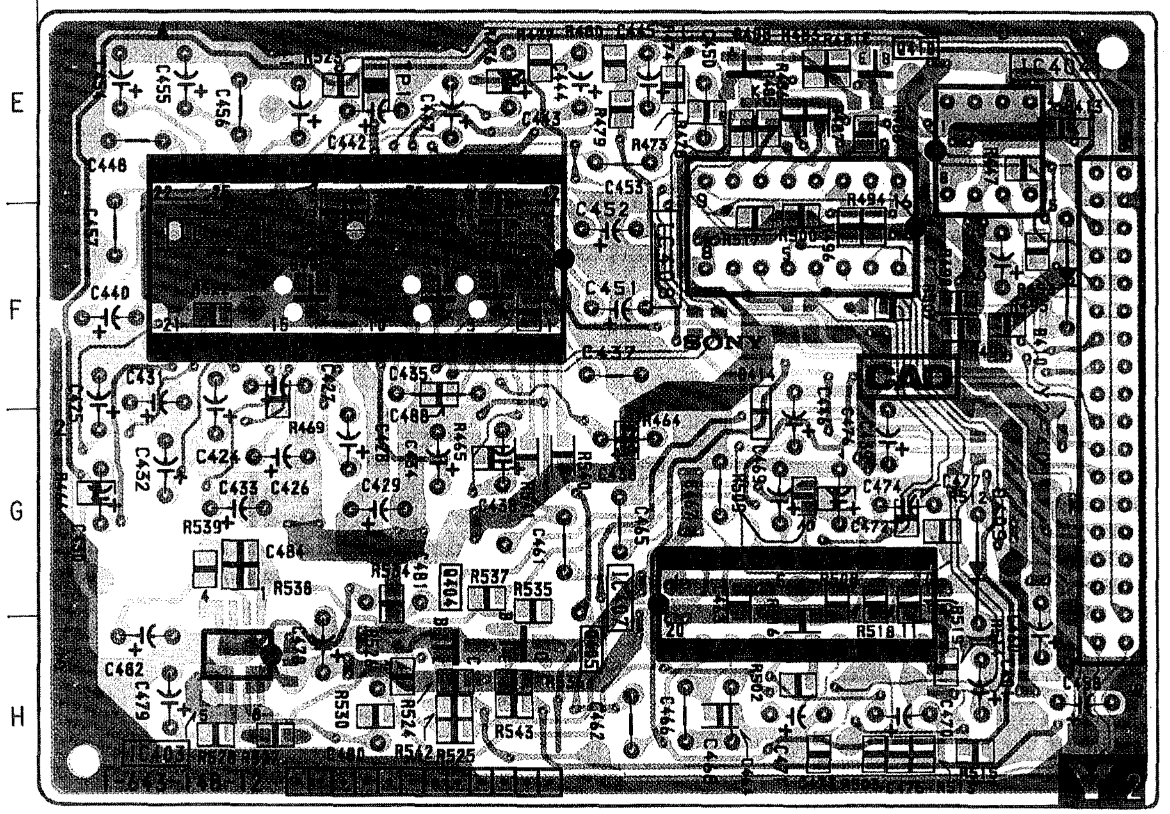
Note :

- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

– Y2 BOARD – 〈Component Side〉


1
2
3
4
5
A
B
C
D
IC406
IC407
IC404
C432
C434
C430
C436
C437
R521
CAD
Y2

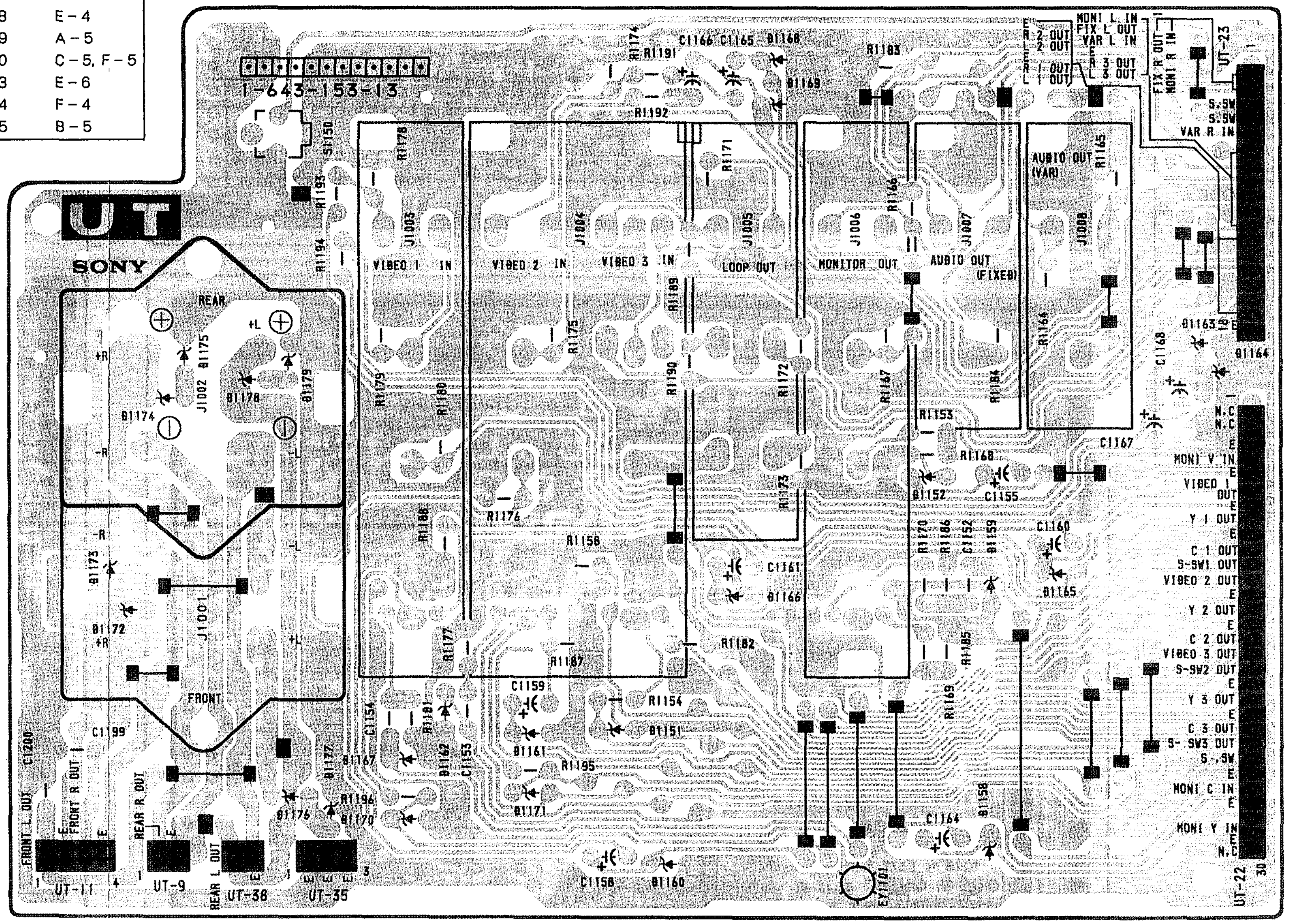
〈Conductor Side〉

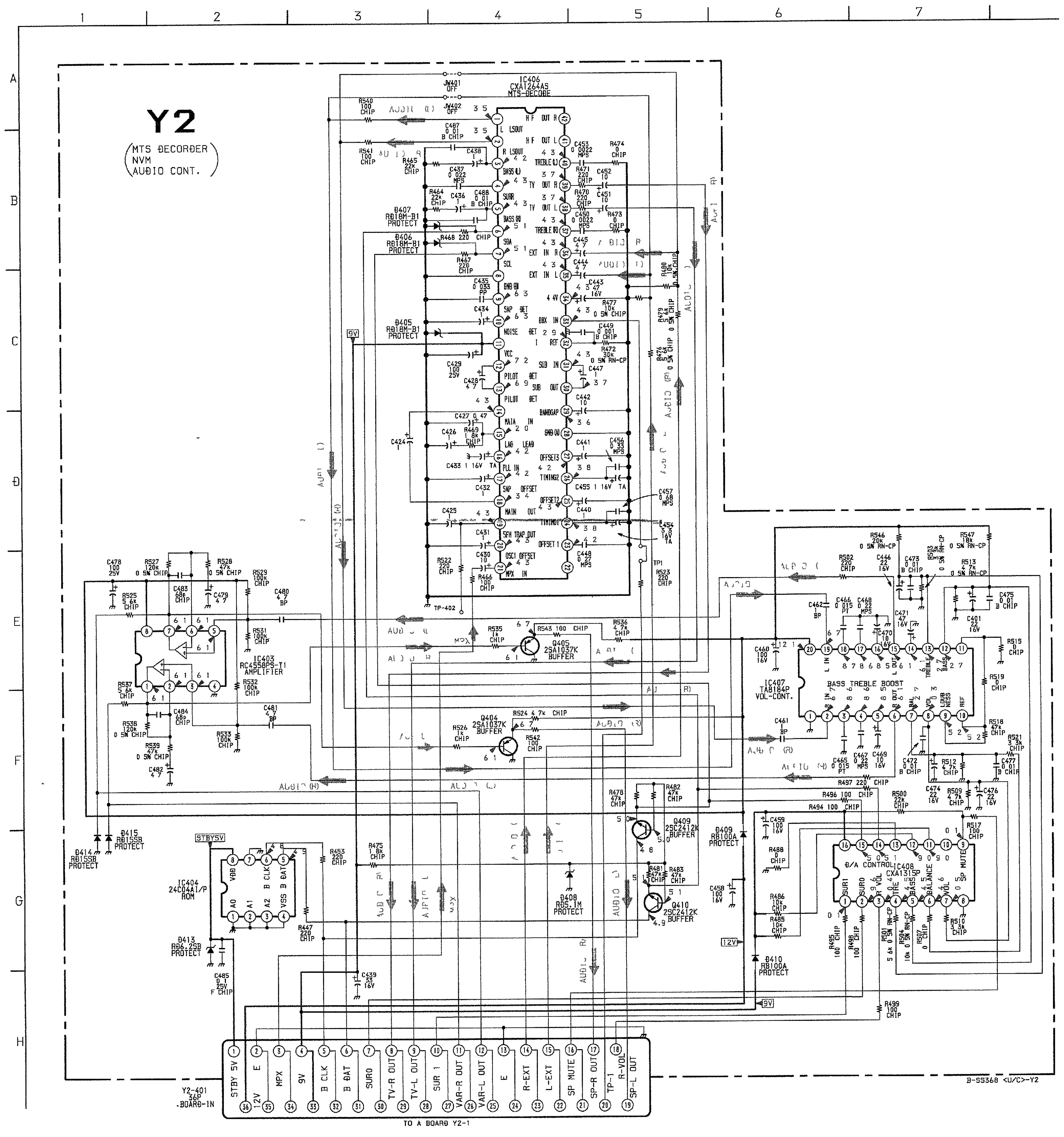

E
F
G
H
C455
C454
C442
C448
C440
C453
C452
C451
R479
R473
R484
C435
C488
R469
C424
C426
C429
C433
C431
C432
R539
R538
C484
R537
R535
R518
R530
R524
R543
R542
C482
C479
SONY
CAD
Y2

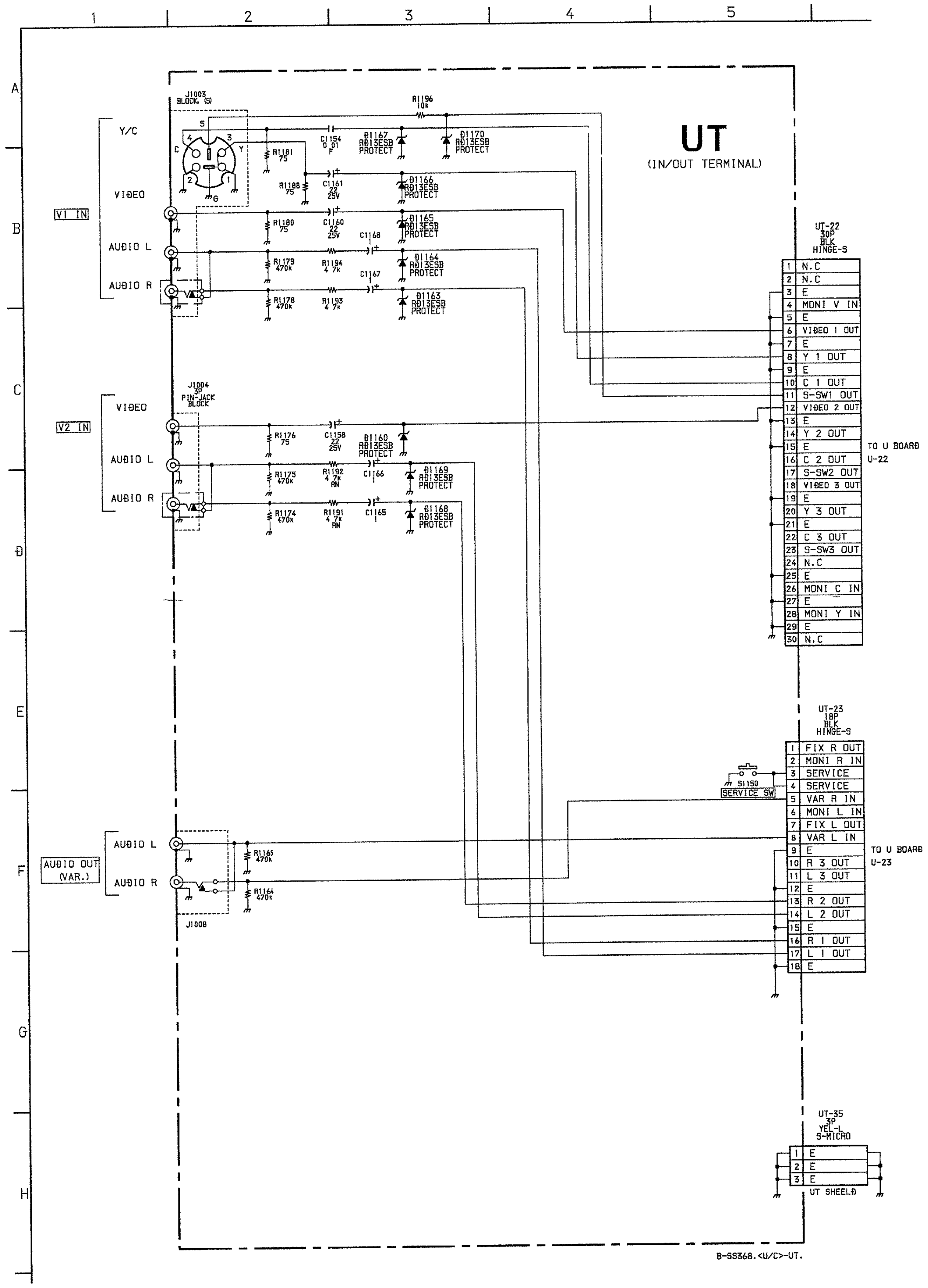
Y2 BOARD

IC	
IC403	H – 1
IC404	D – 5, E – 5
IC406	C – 2, F – 2
IC407	A – 4, G – 4
IC408	C – 4, F – 4
TRANSISTOR	
Q404	H – 3
Q405	H – 3
Q409	D – 5
Q410	E – 5
DIODE	
D405	F – 2
D406	F – 2
D407	F – 3
D408	E – 4
D409	A – 5
D410	C – 5, F – 5
D413	E – 6
D414	F – 4
D415	B – 5

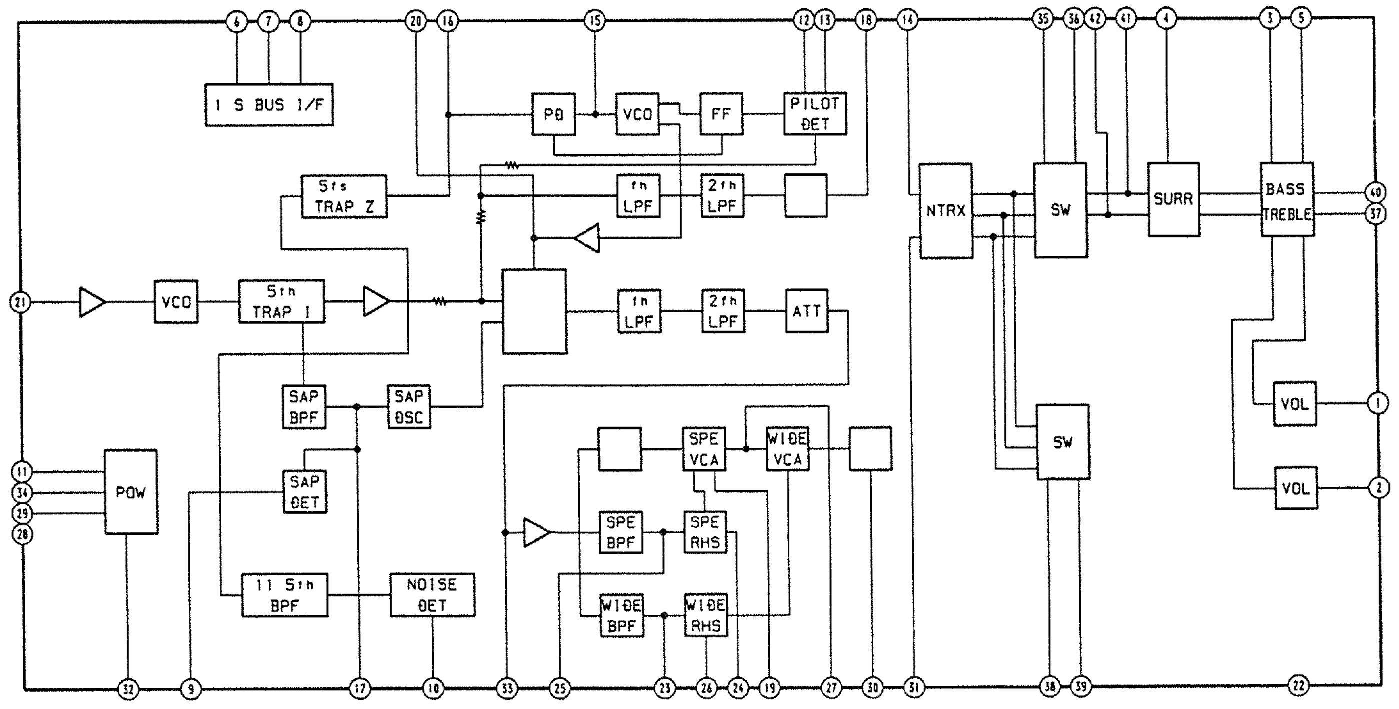
– UT BOARD –


1-643-153-13
UT
SONY
J1003
VIDEO 1 IN
J1004
VIDEO 2 IN
VIDEO 3 IN
J1005
LOOP OUT
J1006
MONITOR OUT
J1007
AUDIO OUT (FIXED)
J1008
AUDIO OUT (VAR)
J1002
REAR
J1001
FRONT
FRONT L OUT
FRONT R OUT
REAR R OUT
REAR L OUT
UT-11
UT-9
UT-38
UT-35
UT-23
UT-22
MONI L IN
FIX L OUT
VAR L IN
FIX R OUT
MONI R IN
S.SW
VAR R IN
MONI V IN
VIDEO 1 OUT
Y 1 OUT
C 1 OUT
S-SW1 OUT
VIDEO 2 OUT
Y 2 OUT
C 2 OUT
VIDEO 3 OUT
S-SW2 OUT
Y 3 OUT
C 3 OUT
S-SW3 OUT
MONI C IN
MONI Y IN
N.C

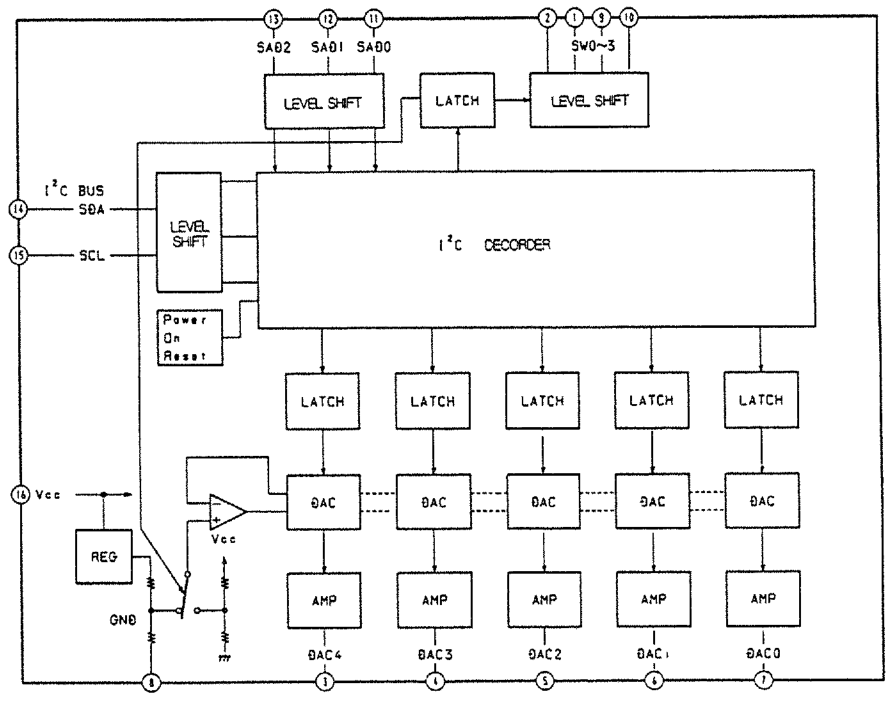

Y2
MTS DECORDER
NVM
AUDIO CONT.
IC406
CXA1264AS
MTS-DECODE
IC403
RC4558PS-T1
AMPLIFIER
IC404
24C04A1/P
ROM
IC407
TA8184P
VOL-CONT.
BASS TREBLE BOOST
IC408
CXA1315P
D/A CONTROL
Q404
2SA1037K
BUFFER
Q405
2SA1037K
BUFFER
Q409
2SC2412K
BUFFER
Q410
2SC2412K
BUFFER
D405 RB16M-B1 PROTECT
D406 RB16M-B1 PROTECT
D407 RB16M-B1 PROTECT
D408 RD5.1M PROTECT
D409 RB100A PROTECT
D410 RB100A PROTECT
D413 RD6.2SB PROTECT
D414 RB155B PROTECT
D415 RB155B PROTECT
STBY5V
5V
9V
12V
TP-402
TP1
1 STBY 5V
2 E
3 12V
4 MPX
5 9V
6 B CLK
7 B DAT
8 SURO
9 TV-R OUT
10 TV-L OUT
11 SUR I
12 VAR-R OUT
13 VAR-L OUT
14 E
15 R-EXT
16 L-EXT
17 SP MUTE
18 SP-R OUT
19 TP-1
20 SP-L OUT
21 R-VOL
Y2-401
36P
BOARD-IN
TO A BOARD Y2-1
B-SS368 <U/C>-Y2


UT
(IN/OUT TERMINAL)
J1003
BLOCK 13
Y/C
VIDEO
AUDIO L
AUDIO R
V1 IN
J1004
PIN-JACK
BLOCK
V2 IN
VIDEO
AUDIO L
AUDIO R
AUDIO OUT
(VAR.)
AUDIO L
AUDIO R
J1008
S1150
SERVICE SW
UT-22
30P
BLK
HINGE-S
1 N.C
2 N.C
3 E
4 MONI V IN
5 E
6 VIDEO 1 OUT
7 E
8 Y 1 OUT
9 E
10 C 1 OUT
11 S-SW1 OUT
12 VIDEO 2 OUT
13 E
14 Y 2 OUT
15 E
16 C 2 OUT
17 S-SW2 OUT
18 VIDEO 3 OUT
19 E
20 Y 3 OUT
21 E
22 C 3 OUT
23 S-SW3 OUT
24 N.C
25 E
26 MONI C IN
27 E
28 MONI Y IN
29 E
30 N.C
TO U BOARD
U-22
UT-23
18P
BLK
HINGE-S
1 FIX R OUT
2 MONI R IN
3 SERVICE
4 SERVICE
5 VAR R IN
6 MONI L IN
7 FIX L OUT
8 VAR L IN
9 E
10 R 3 OUT
11 L 3 OUT
12 E
13 R 2 OUT
14 L 2 OUT
15 E
16 R 1 OUT
17 L 1 OUT
18 E
TO U BOARD
U-23
UT-35
3P
YEL-L
S-MICRO
1 E
2 E
3 E
UT SHEELD
B-SS368.<U/C>-UT.

Y2 BOARD IC406 CXA1264AS


I S BUS I/F
PD
VCO
FF
PILOT DET
5fh TRAP 2
fh LPF
2fh LPF
VCO
5fh TRAP 1
fh LPF
2fh LPF
ATT
MTRX
SW
SURR
BASS TREBLE
SAP BPF
SAP OSC
SAP DET
POW
SPE VCA
WIDE VCA
SW
VOL
VOL
SPE BPF
SPE RMS
WIDE BPF
WIDE RMS
11 5fh BPF
NOISE DET

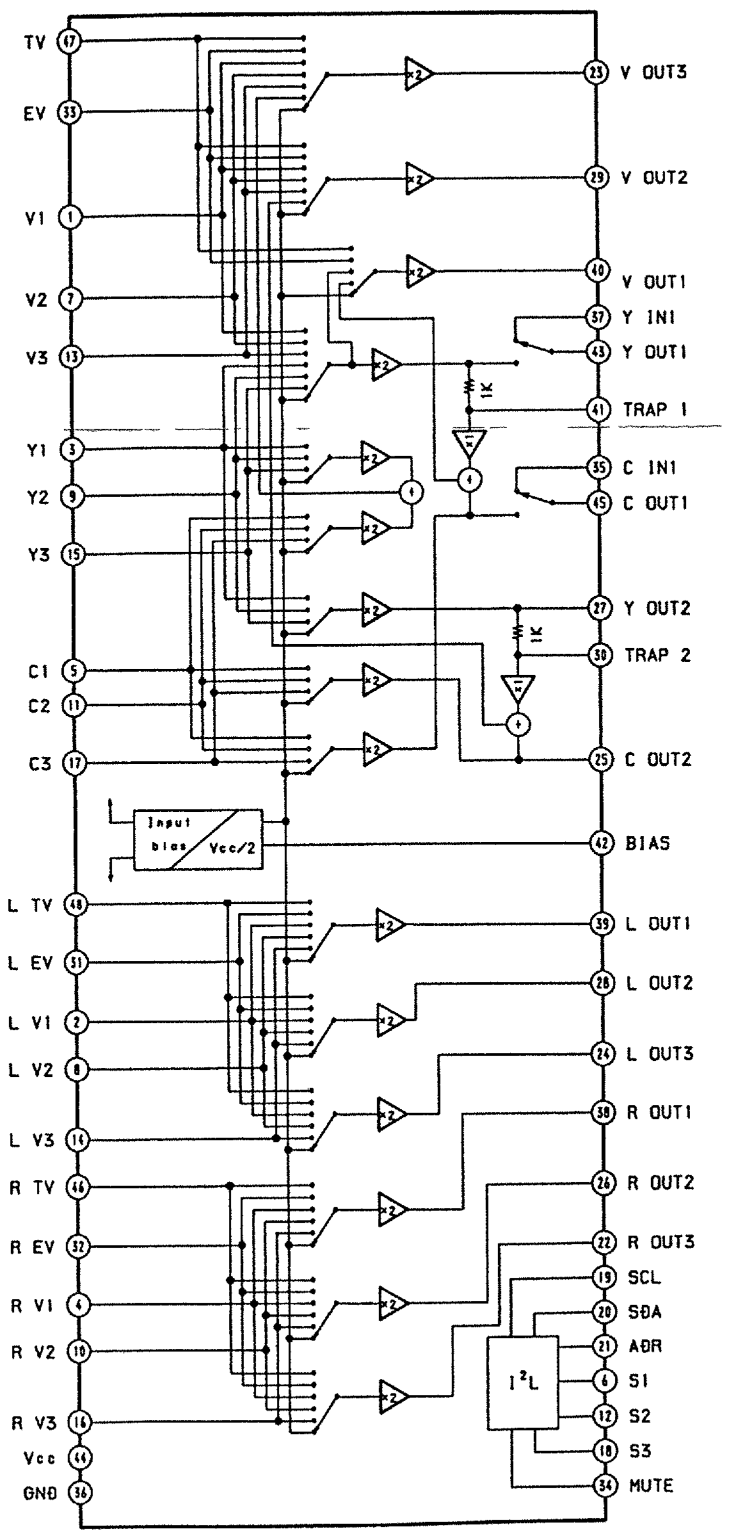
Y2 BOARD IC408 CXA1315P


SAD2
SAD1
SAD0
SW0~3
LEVEL SHIFT
LATCH
LEVEL SHIFT
I²C BUS
SDA
SCL
LEVEL SHIFT
I²C DECORDER
Power On Reset
LATCH
LATCH
LATCH
LATCH
LATCH
Vcc
DAC
DAC
DAC
DAC
DAC
REG
GND
AMP
AMP
AMP
AMP
AMP
DAC4
DAC3
DAC2
DAC1
DAC0

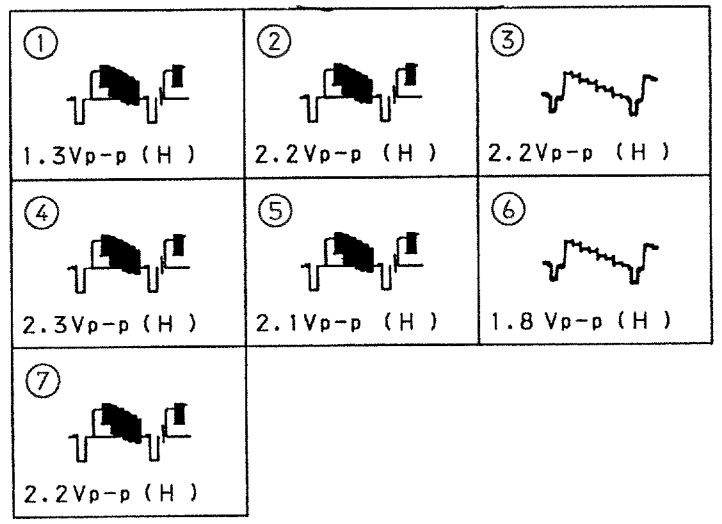
Schematic diagrams
← Y2 UT boards

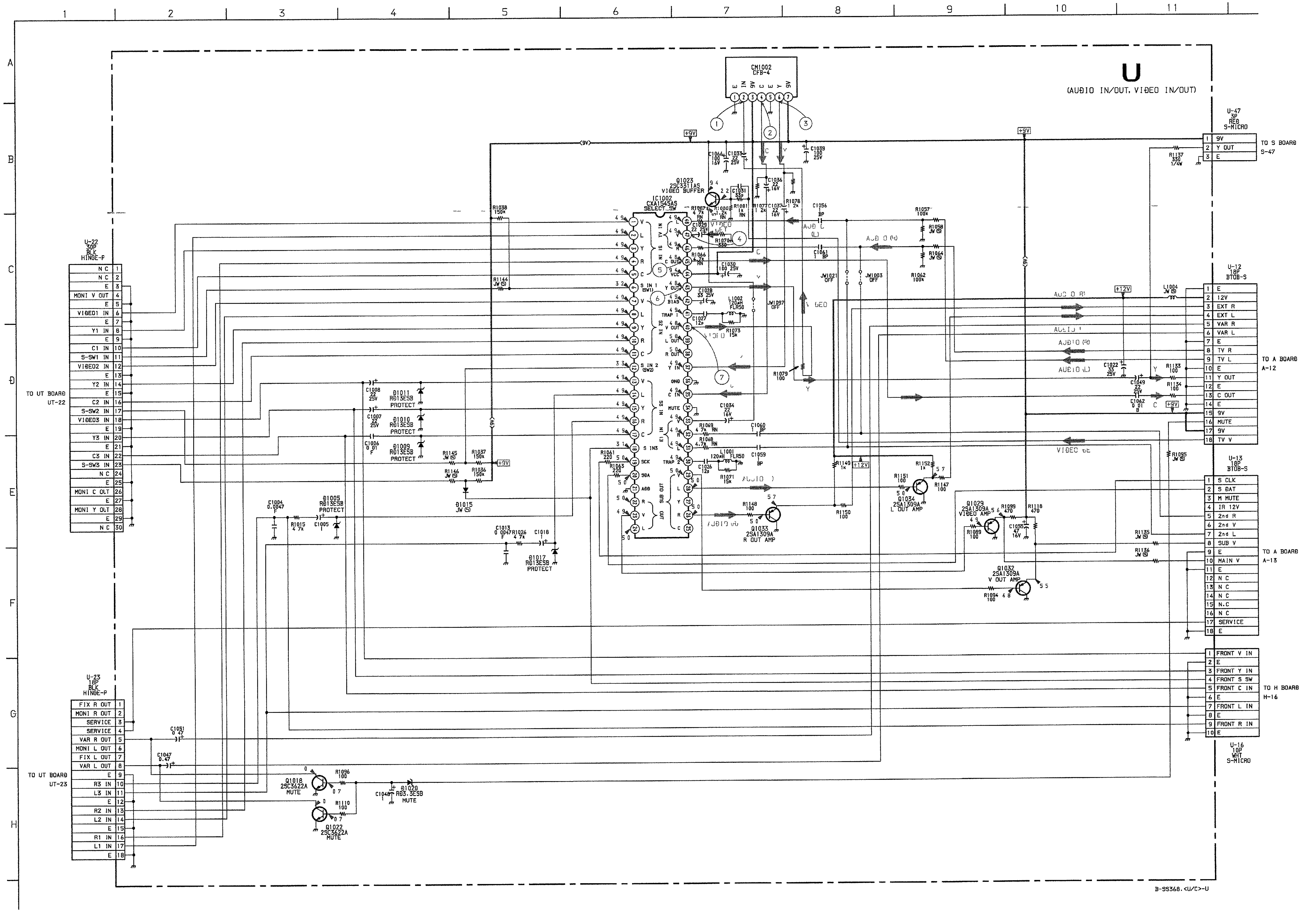
Schematic diagrams
U board →

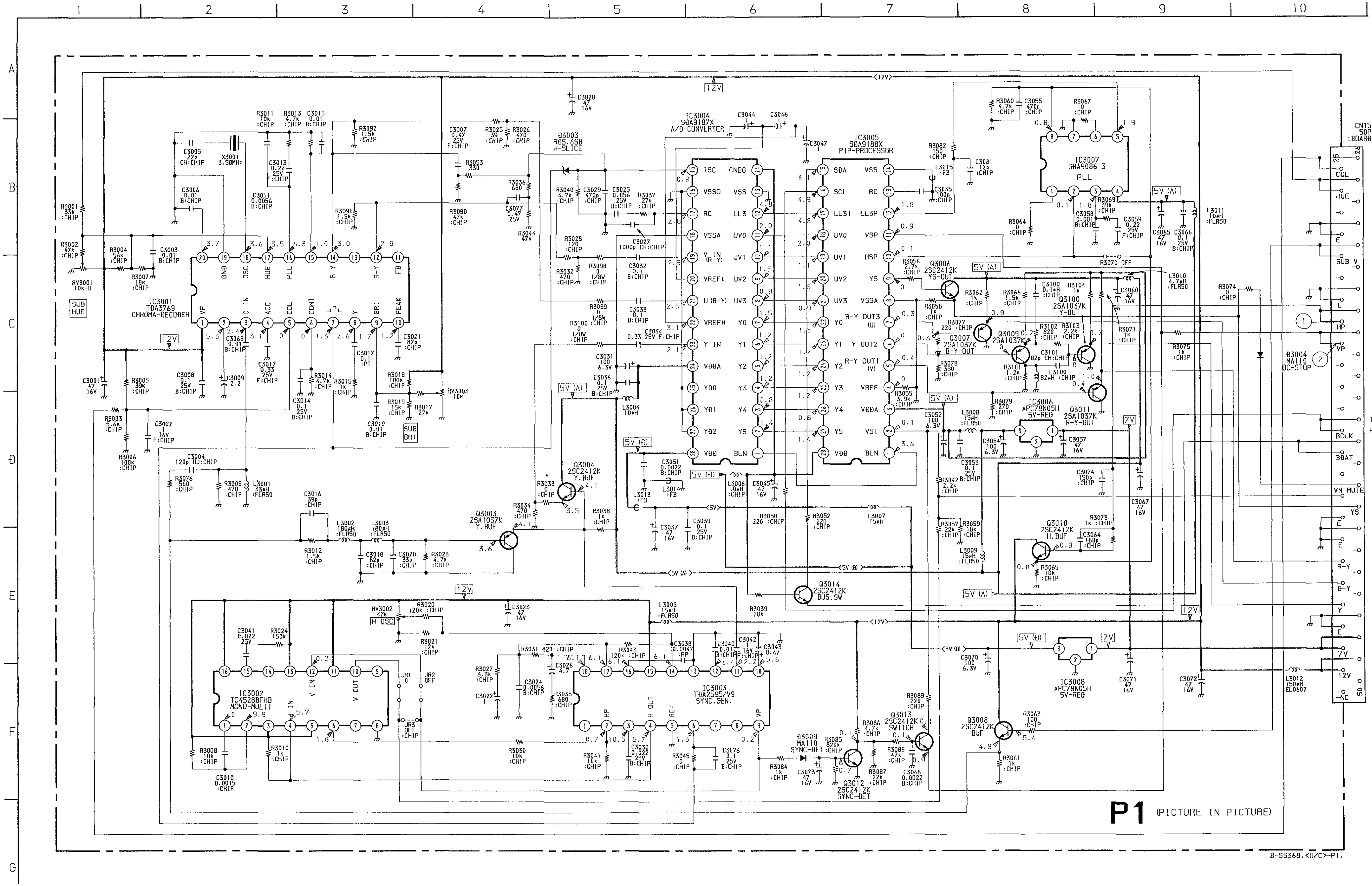
U BOARD IC1002 CXA1545S


TV 47
EV 33
V1 1
V2 2
V3 13
Y1 3
Y2 9
Y3 15
C1 5
C2 11
C3 17
L TV 48
L EV 31
L V1 2
L V2 8
L V3 14
R TV 46
R EV 32
R V1 4
R V2 10
R V3 16
Vcc 44
GND 36
V OUT3 23
V OUT2 29
V OUT1 40
Y IN1 37
Y OUT1 43
TRAP 1 41
C IN1 35
C OUT1 45
Y OUT2 27
TRAP 2 30
C OUT2 25
BIAS 42
L OUT1 39
L OUT2 28
L OUT3 24
R OUT1 38
R OUT2 26
R OUT3 22
SCL 19
SDA 20
ADR 21
S1 6
S2 12
S3 18
MUTE 34
Input bias Vcc/2
1K
I²L

• U BOARD WAVEFORMS

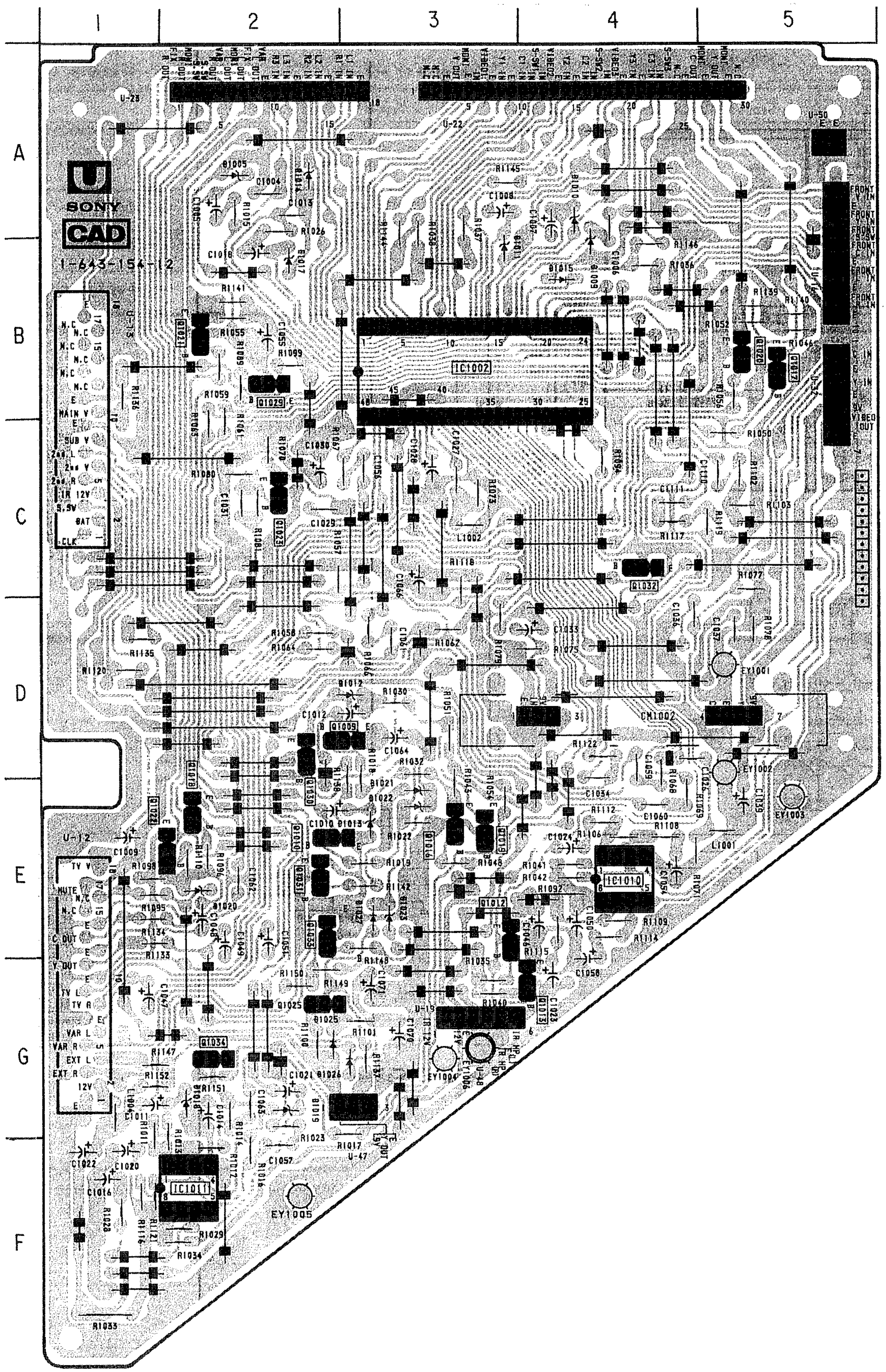

①
1.3Vp-p (H)
②
2.2Vp-p (H)
③
2.2Vp-p (H)
④
2.3Vp-p (H)
⑤
2.1Vp-p (H)
⑥
1.8 Vp-p (H)
⑦
2.2Vp-p (H)


U
(AUDIO IN/OUT, VIDEO IN/OUT)
CM1002
CFB-4
IC1002
CXA1545AS
SELECT SW
Q1023
2SC5311AS
VIDEO BUFFER
U-22
30P
BLK
HINGE-P
TO UT BOARD
UT-22
N C
E
MONI V OUT
VIDEO1 IN
Y1 IN
C1 IN
S-SW1 IN
VIDEO2 IN
Y2 IN
C2 IN
S-SW2 IN
VIDEO3 IN
Y3 IN
C3 IN
S-SW3 IN
MONI C OUT
MONI Y OUT
U-23
18P
BLK
HINGE-P
TO UT BOARD
UT-23
FIX R OUT
MONI R OUT
SERVICE
VAR R OUT
MONI L OUT
FIX L OUT
VAR L OUT
R3 IN
L3 IN
R2 IN
L2 IN
R1 IN
L1 IN
U-47
3P
RED
S-MICRO
TO S BOARD
S-47
9V
Y OUT
E
U-12
18P
BTOB-S
TO A BOARD
A-12
12V
EXT R
EXT L
VAR R
VAR L
TV R
TV L
Y OUT
C OUT
9V
MUTE
TV V
U-13
18P
BTOB-S
TO A BOARD
A-13
S CLK
S DAT
M MUTE
IR 12V
2nd R
2nd V
2nd L
SUB V
MAIN V
N C
SERVICE
U-16
10P
WHT
S-MICRO
TO H BOARD
H-16
FRONT V IN
FRONT Y IN
FRONT S SW
FRONT C IN
FRONT L IN
FRONT R IN
D1011 RD13ESB PROTECT
D1010 RD13ESB PROTECT
D1009 RD13ESB PROTECT
D1005 RD13ESB PROTECT
D1017 RD13ESB PROTECT
D1015 JW
D1020 RD3.3ESB MUTE
Q1018 2SC3622A MUTE
Q1022 2SC3622A MUTE
Q1033 2SA1309A R OUT AMP
Q1034 2SA1309A L OUT AMP
Q1029 2SA1309A VIDEO AMP
Q1032 2SA1309A V OUT AMP
L1001 120μH FLR50
L1002 120μH FLR50
L1004
JW1021 OFF
JW1003 OFF
JW1097 OFF
AUDIO (R)
AUDIO (L)
VIDEO
+9V
+12V
(9V)
B-55368.<U/C>-U


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
G
IC3001
TDA3769
CHROMA-DECODER
IC3002
TC4528BFHB
MONO-MULTI
IC3003
TDA2595/V9
SYNC.GEN.
IC3004
SDA9187X
A/D-CONVERTER
IC3005
SDA9188X
PIP-PROCESSOR
IC3006
μPC78N05H
5V-REG
IC3007
SDA9086-3
PLL
IC3008
μPC78N05H
5V-REG
Q3003
2SA1037K
Y.BUF
Q3004
2SC2412K
Y.BUF
Q3006
2SC2412K
YS-OUT
Q3007
2SA1037K
B-Y-OUT
Q3008
2SC2412K
BUF
Q3009
2SA1037K
Q3010
2SC2412K
H.BUF
Q3011
2SA1037K
R-Y-OUT
Q3012
2SC2412K
SYNC-DET
Q3013
2SC2412K
SWITCH
Q3014
2SC2412K
BUS.SW
Q3100
2SA1037K
Y-OUT
D3003
RD5.6SB
H-SLICE
D3004
MA110
DC-STOP
D3009
MA110
SYNC-DET
X3001
3.58MHz
RV3001
10k-B
SUB HUE
SUB BRT
RV3002
47k
H OSC
RV3003
10k
12V
5V (A)
5V (B)
7V
CN151
50P
:BOARD-IN
TO A BOARD
P12-1
COL
HUE
SUB V
HP
VP
BCLK
BDAT
VM MUTE
YS
R-Y
B-Y
Y
NC
P1 (PICTURE IN PICTURE)
B-SS368.<U/C>-P1.

U [AUDIO IN/OUT, VIDEO IN/OUT] **P1** [P IN P]

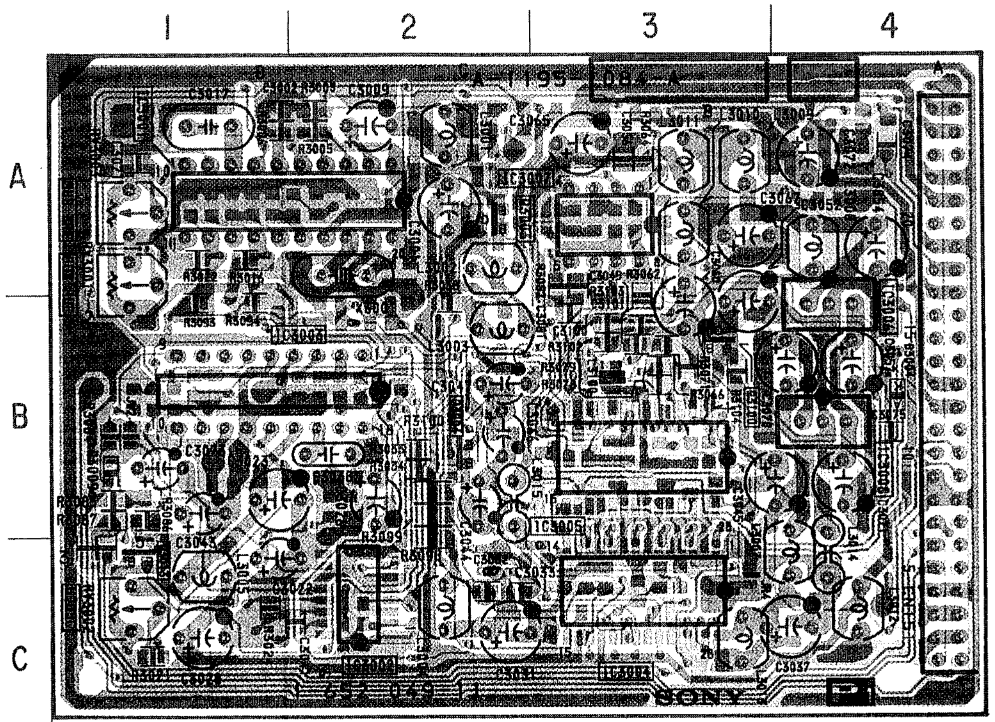
– U BOARD –


1
2
3
4
5
A
B
C
D
E
G
F
U
SONY
CAD
1-643-154-12
IC1002
IC1010
IC1011

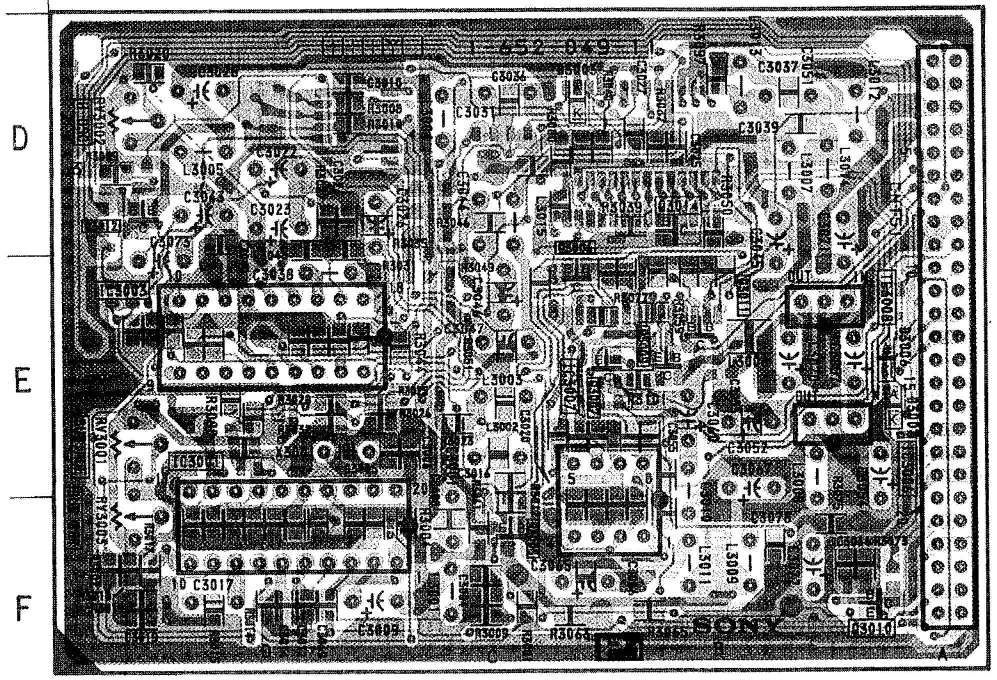
U BOARD

IC	
IC1002	B – 3
TRANSISTOR	
Q1018	E – 2
Q1022	E – 1
Q1023	C – 2
Q1029	B – 2
Q1032	C – 4
Q1033	E – 2
Q1034	G – 2
DIODE	
D1005	A – 2
D1009	B – 4
D1010	A – 4
D1011	B – 3
D1015	B – 4
D1017	B – 2
D1020	E – 2

– P1 BOARD – ⟨Component Side⟩


1
2
3
4
A
B
C
SONY
P1

⟨Conductor Side⟩



Note :

- ░ : Pattern from the side which enables seeing.
- ▓ : Pattern of the rear side.

-3

STOR

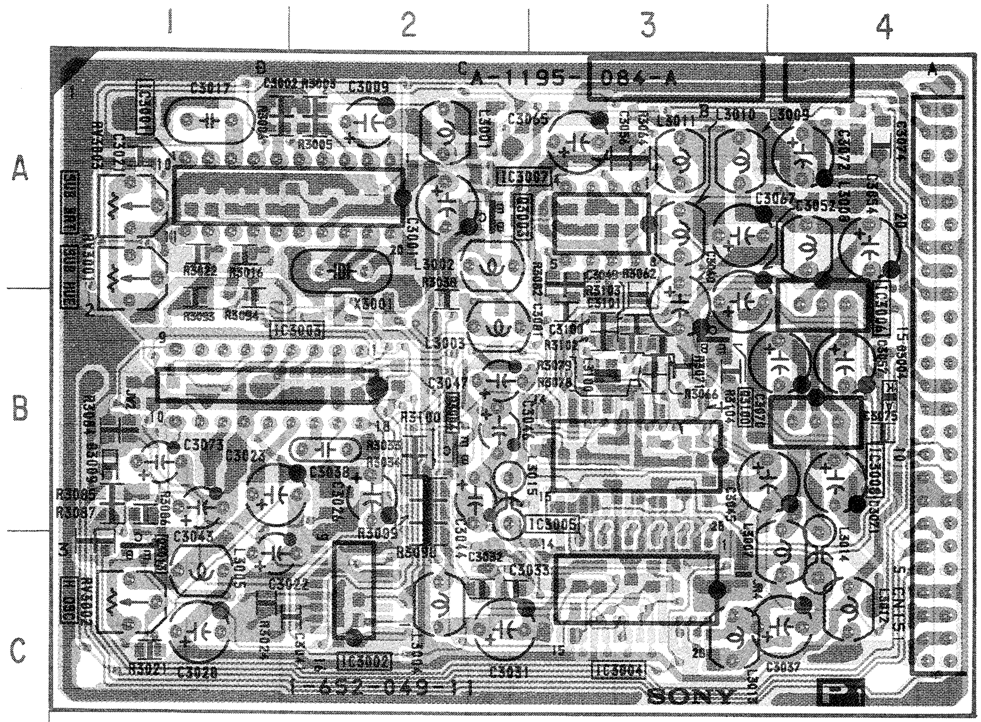
-2
-1
-2
-2
-4
-2
-2

E

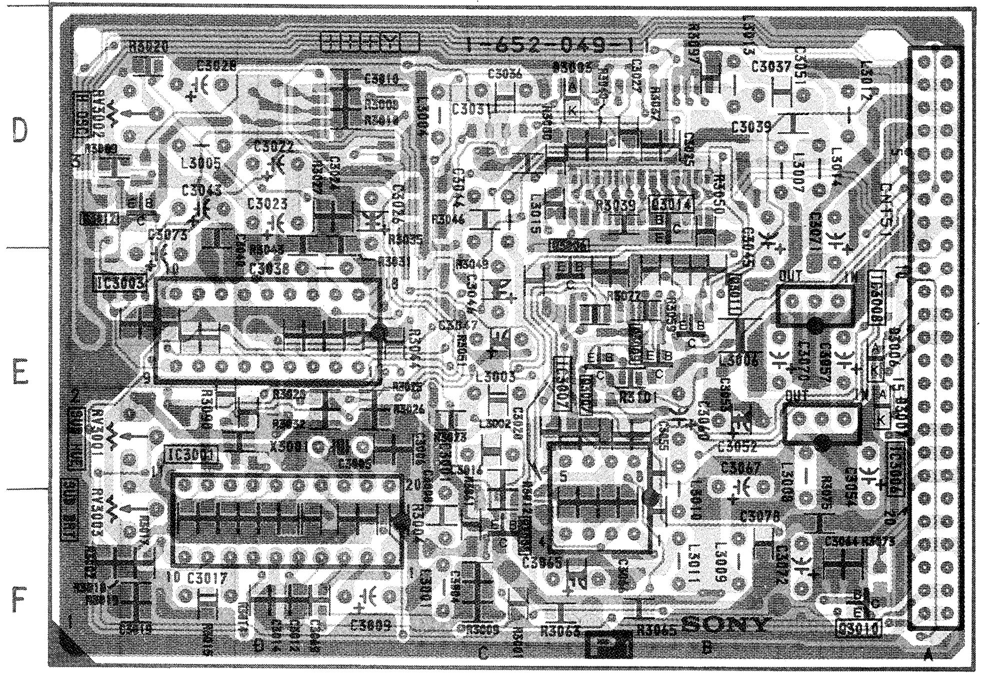
-2
-4
-4
-3
-4
-2
-2

– P1 BOARD –

⟨Component Side⟩


1
2
3
4
A
B
C
A-1195-084-A
1-652-049-11
SONY
P1
IC3001
IC3002
IC3003
IC3004
IC3005
IC3007
X3001
CN151

⟨Conductor Side⟩

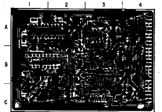

D
E
F
1-652-049-11
SONY
P1
IC3001
IC3003
IC3007
X3001
RV3001
RV3002
RV3003
CN151
IN
OUT

Note :

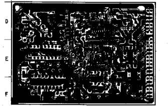
- ░ : Pattern from the side which enables seeing.
- ▒ : Pattern of the rear side.

-9
STOR
-2
-1
-2
-2
-4
-2
-2
E
-2
-4
-4
-3
-4
-2
-2

– P1 BOARD – (Component Side)

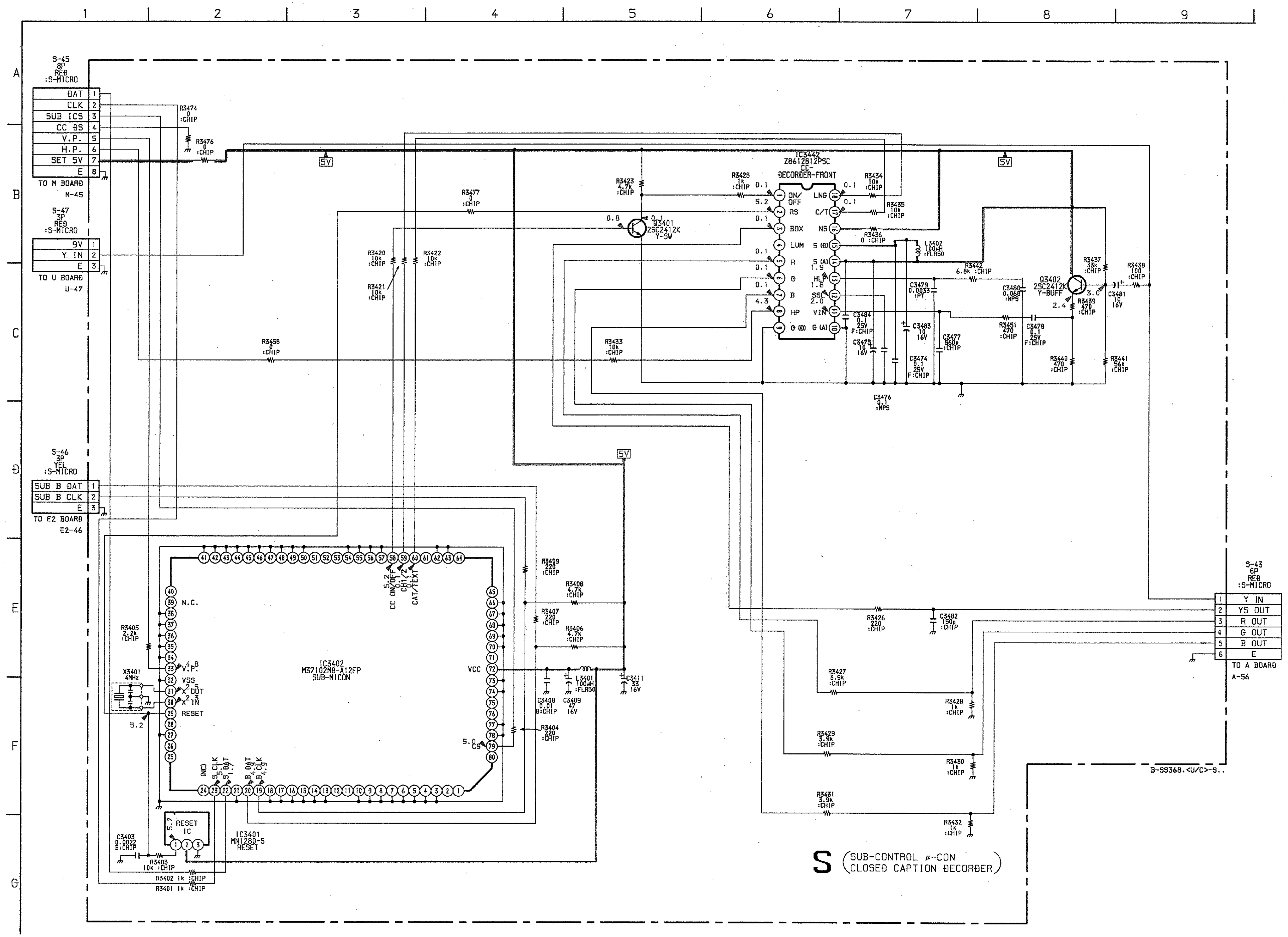


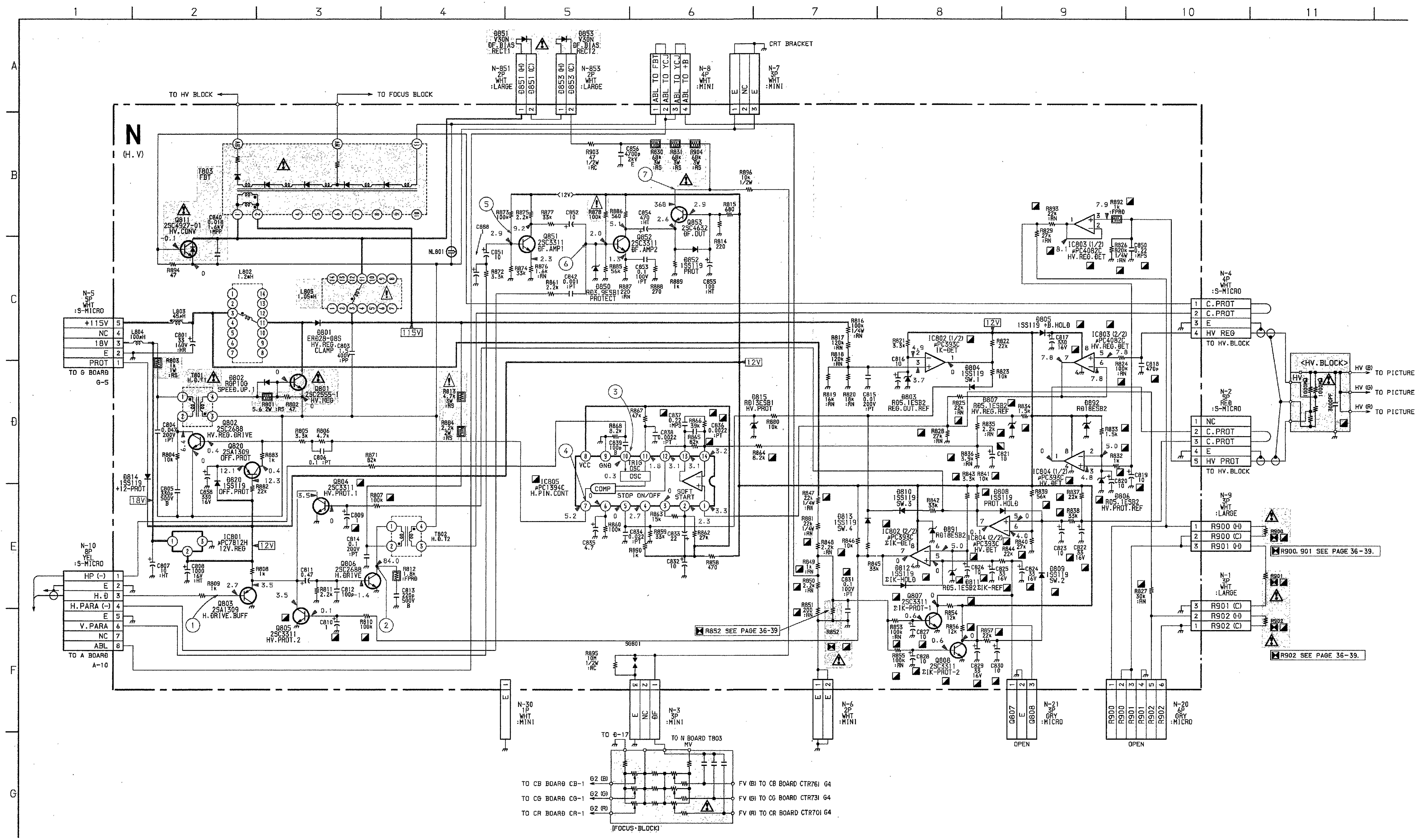
(Conductor Side)



Note :

- ▇ : Pattern from the side which enables seeing.
- ▇ : Pattern of the rear side.


S
(SUB-CONTROL µ-CON
CLOSED CAPTION DECORDER)
S-45 8P RED :S-MICRO
DAT
CLK
SUB ICS
CC DS
V.P.
H.P.
SET 5V
E
TO M BOARD M-45
S-47 3P RED :S-MICRO
9V
Y IN
E
TO U BOARD U-47
S-46 3P YEL :S-MICRO
SUB B DAT
SUB B CLK
E
TO E2 BOARD E2-46
IC3442 ZB612B12PSC DECORDER-FRONT
Q3401 2SC2412K Y-SW
Q3402 2SC2412K Y-BUFF
IC3402 M37102M8-A12FP SUB-MICON
IC3401 MN1280-5 RESET
RESET IC
X3401 4MHz
5V
S-43 5P RED :S-MICRO
Y IN
YS OUT
R OUT
G OUT
B OUT
E
TO A BOARD A-56


N
(H.V)
TO HV BLOCK
TO FOCUS BLOCK
T802 FBT
Q811 2SC4927-01 HV.CONV
N-5 5P WHT :S-MICRO
+115V
NC
18V
E
PROT
TO G BOARD G-5
Q802 2SC2688 HV.REG.DRIVE
Q801 2SC3556-1 HV.REG
IC801 µPC7812H 12V.REG
IC805 µPC494C H.PIN.CONT
N-10 8P YEL :S-MICRO
HP(-)
E
H.D
H.PARA(-)
E
V.PARA
NC
ABL
TO A BOARD A-10
Q851 2SC3311 BF.AMP1
Q852 2SC3311 BF.AMP2
Q853 2SC1624 BF.OUT
IC802 µPC555C IK-DET
IC803 µPC4082C HV.REG.DET
IC804 µPC555C HV.PROT.REF
N-4 4P WHT :S-MICRO
C.PROT
C.PROT
E
HV REG
TO HV.BLOCK
N-2 5P RED :S-MICRO
NC
C.PROT
C.PROT
E
E
<HV.BLOCK>
TO PICTURE TUBE B
TO PICTURE TUBE G
TO PICTURE TUBE R
N-9 3P WHT :LARGE
R900 (B)
R900 (C)
R901 (B)
N-1 3P WHT :LARGE
R902 (C)
R902 (B)
R902 (C)
R900.901 SEE PAGE 36-39.
R902 SEE PAGE 36-39.
R852 SEE PAGE 36-39.
N-851 2P WHT :LARGE
N-853 2P WHT :LARGE
N-8 4P WHT :MINI
N-7 3P WHT :MINI
CRT BRACKET
N-30 1P WHT :MINI
N-3 3P WHT :MINI
N-6 3P WHT :MINI
N-21 2P GRY :MICRO
N-20 6P GRY :MICRO
OPEN
OPEN
TO G-17
TO N BOARD T803 HV
TO CB BOARD CB-1
TO CG BOARD CG-1
TO CR BOARD CR-1
FV TO CB BOARD CTR76
FV TO CG BOARD CTR73
FV TO CR BOARD CTR70
[FOCUS-BLOCK]
115V
12V
18V

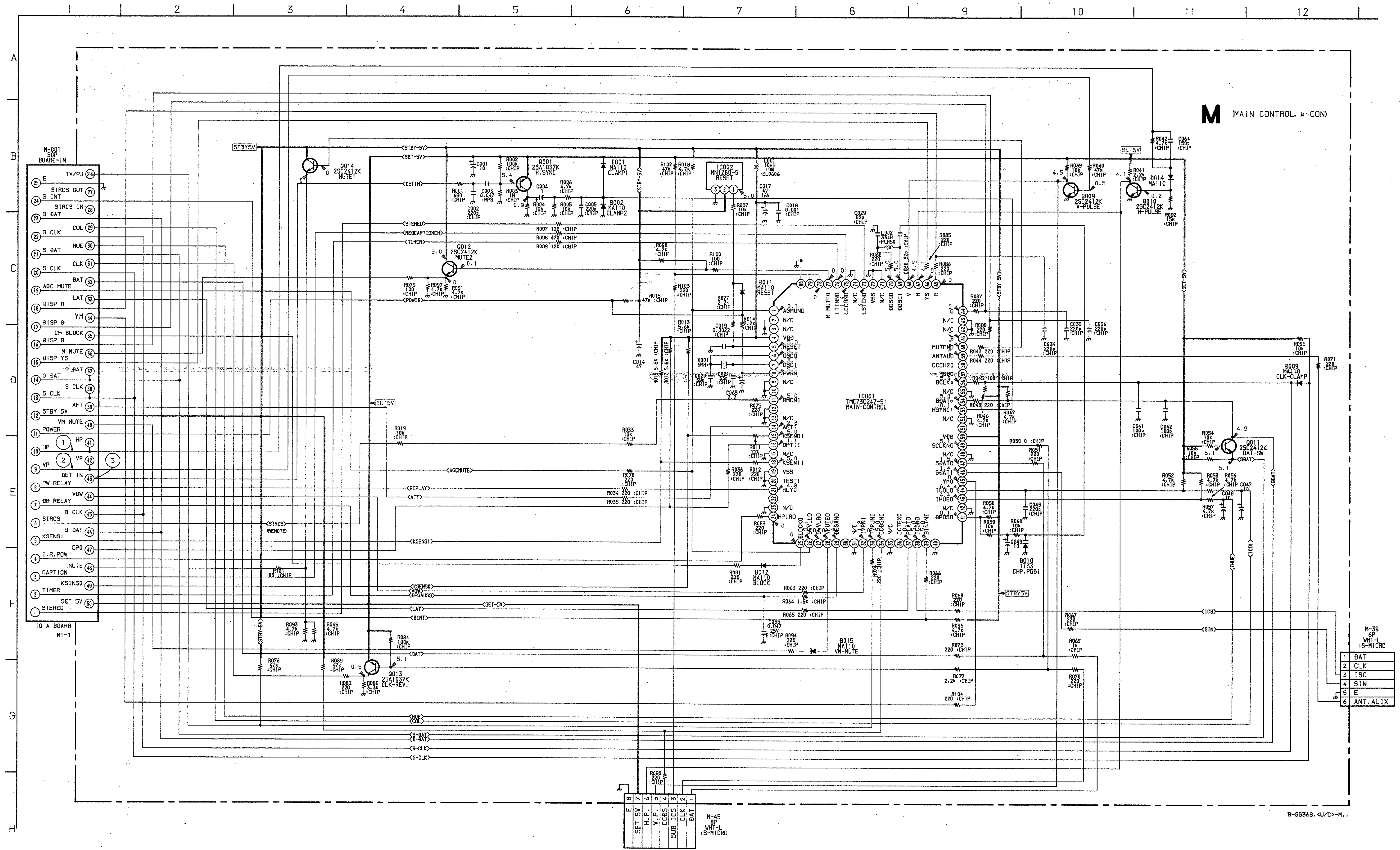
Schematic diagrams

← P1 board

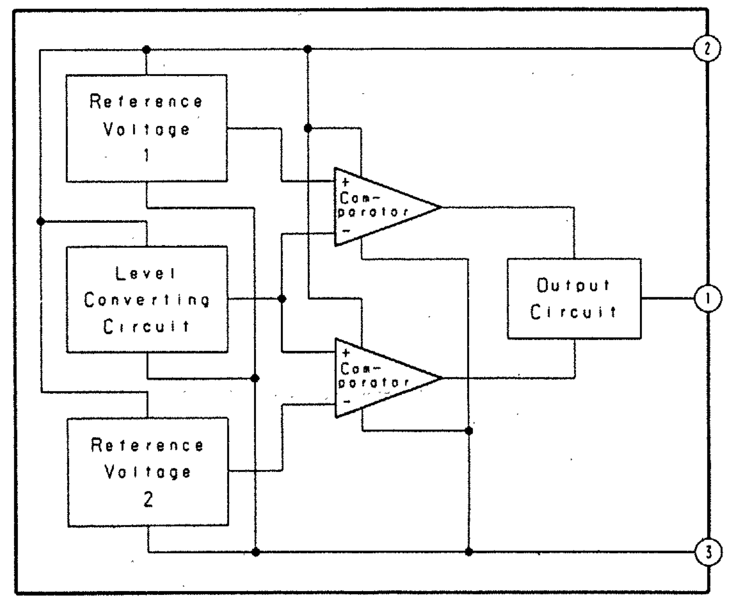
Schematic diagrams

S N boards →

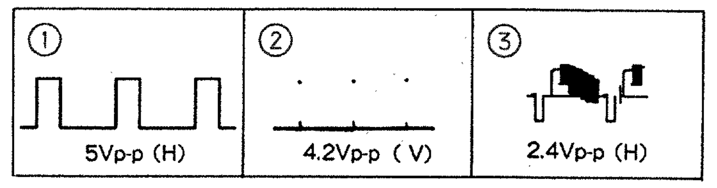
N [H. V] **M** [MAIN CONTROL, µ-CON] **S** [SUB-CONTROL, µ-CON, CLOSED CAPTION DECORDER]


M (MAIN CONTROL, µ-CON)
M-001 50P BOARD-IN
TO A BOARD M1-1
IC001 TMC73C247-51 MAIN-CONTROL
IC002 MN1280-S RESET
Q001 2SA1037K H.SYNC
Q009 2SC2412K V-PULSE
Q010 2SC2412K H-PULSE
Q011 2SC2412K BAT-SW
Q012 2SC2412K MUTE2
Q013 2SA1037K CLK-REV.
Q014 2SC2412K MUTE1
D001 MA110 CLAMP1
D002 MA110 CLAMP2
D011 MA110 RESET
D012 MA110 BLOCK
D015 MA110 VM-MUTE
M-39 6P WHT-L S-MICRO
M-45 8P WHT-L S-MICRO
TO S BOARD S-45
B-55368 <U/C>-N..

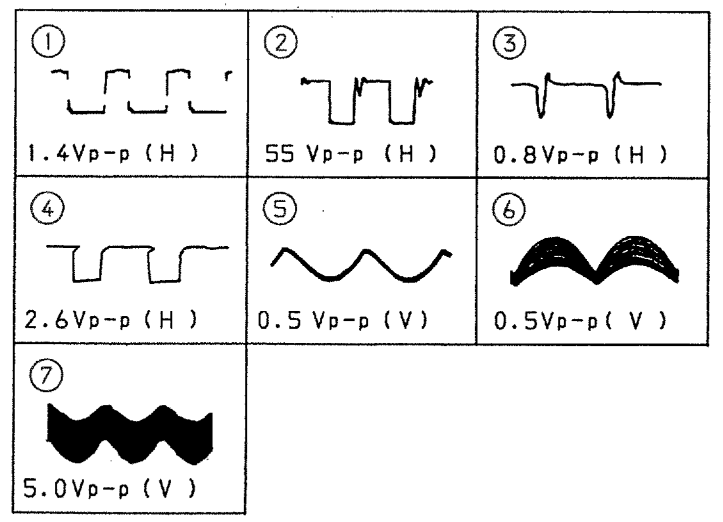
S BOARD IC3401 MN1280-S


Reference Voltage 1
Level Converting Circuit
Reference Voltage 2
Com-parator
Com-parator
Output Circuit
2
1
3

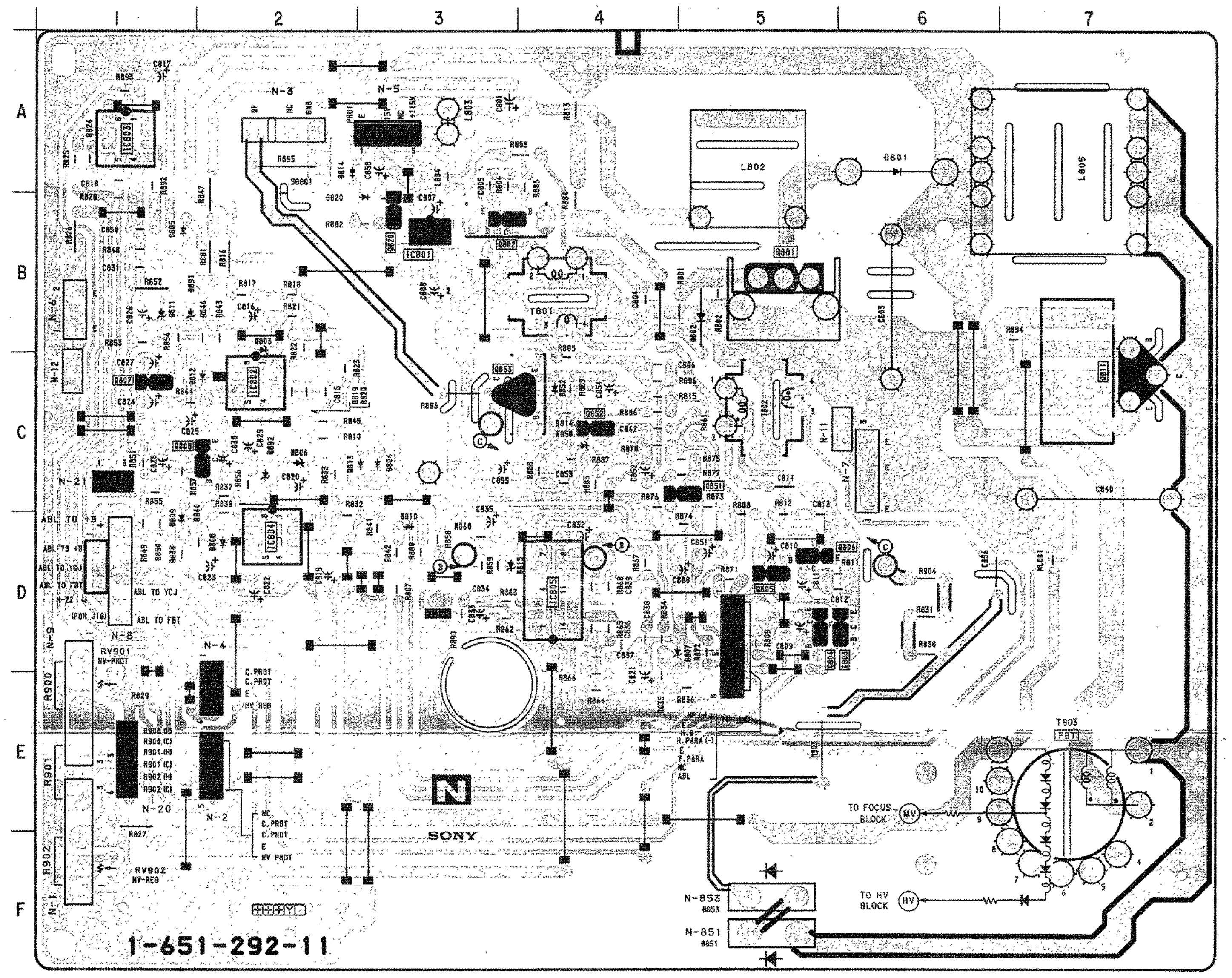
• M BOARD WAVEFORMS



• N BOARD WAVEFORMS



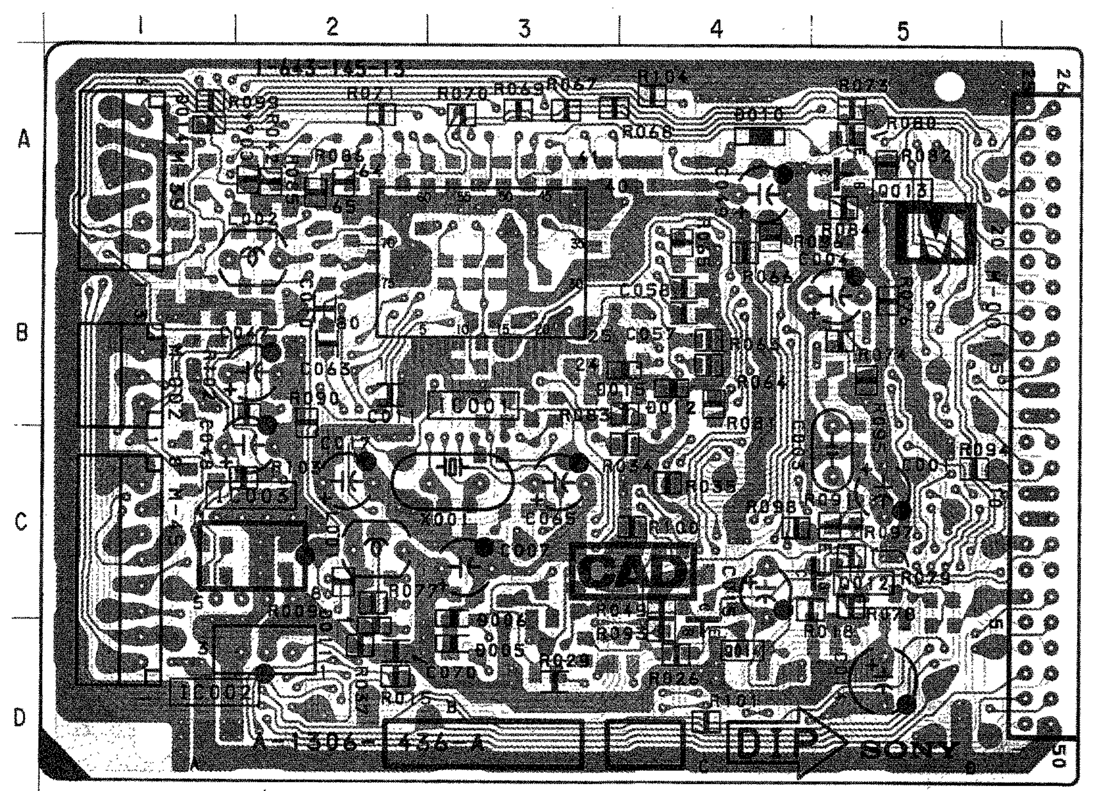
– N BOARD –


1-651-292-11
SONY
N
TO FOCUS BLOCK
TO HV BLOCK

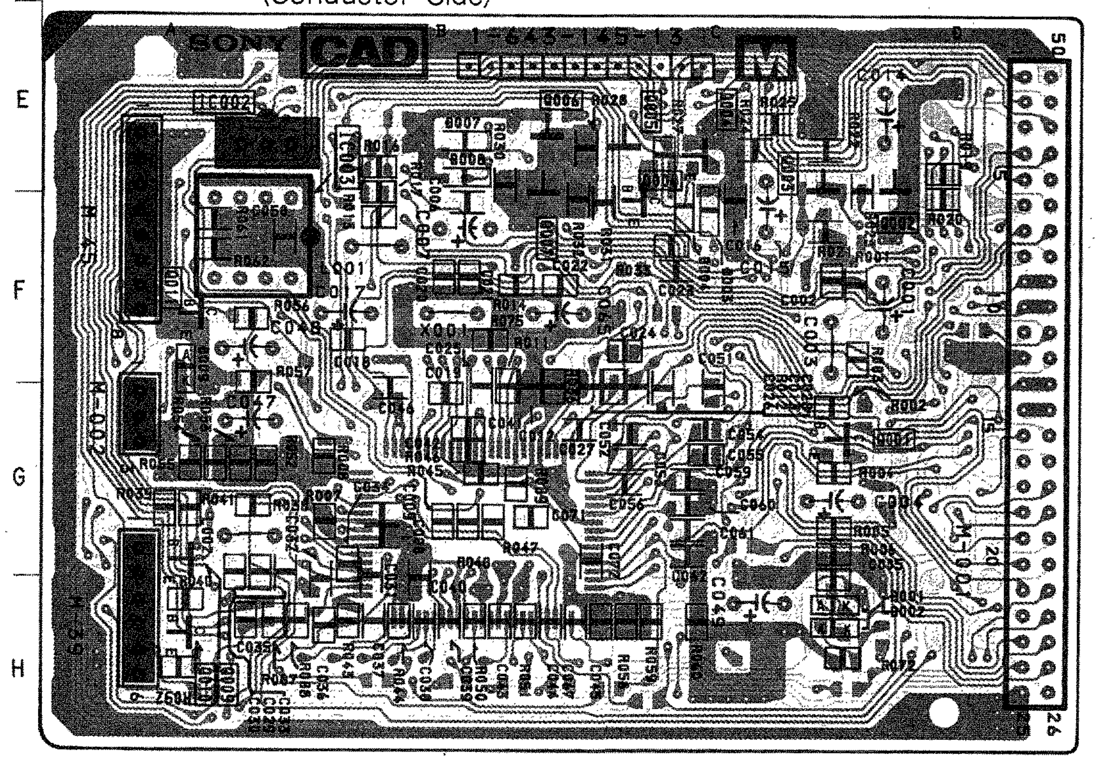
N BOARD

IC		DIODE	
IC801	B – 3	D801	A – 6
IC802	C – 2	D802	B – 5
IC803	A – 1	D803	C – 2
IC804	D – 2	D804	C – 3
IC805	D – 4	D805	B – 1
TRANSISTOR		D806	C – 2
		D807	D – 4
Q801	B – 5	D808	D – 2
Q802	B – 3	D809	D – 1
Q803	D – 5	D810	D – 3
Q804	D – 5	D811	B – 1
Q805	D – 5	D812	C – 2
Q806	D – 5	D813	C – 2
Q807	C – 1	D814	A – 2
Q808	C – 1	D815	D – 3
Q811	C – 7	D820	A – 3
Q820	B – 3	D850	C – 4
Q851	C – 5	D851	E – 5
Q852	C – 4	D852	C – 4
Q853	C – 4	D853	E – 5
		D891	B – 1
		D892	C – 2

– M BOARD – (Component Side)


1-643-145-13
M
CAD
DIP
SONY
1-606-436-A
26
50

(Conductor Side)

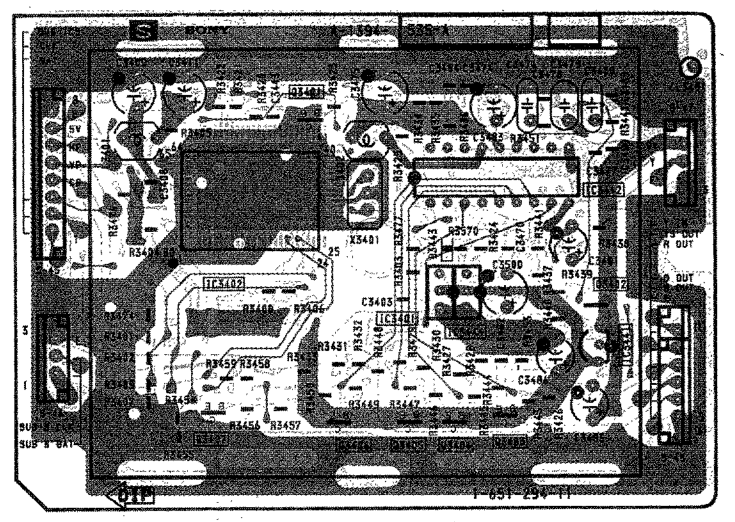

SONY
CAD
1-643-145-13
M
50
26

M BOARD

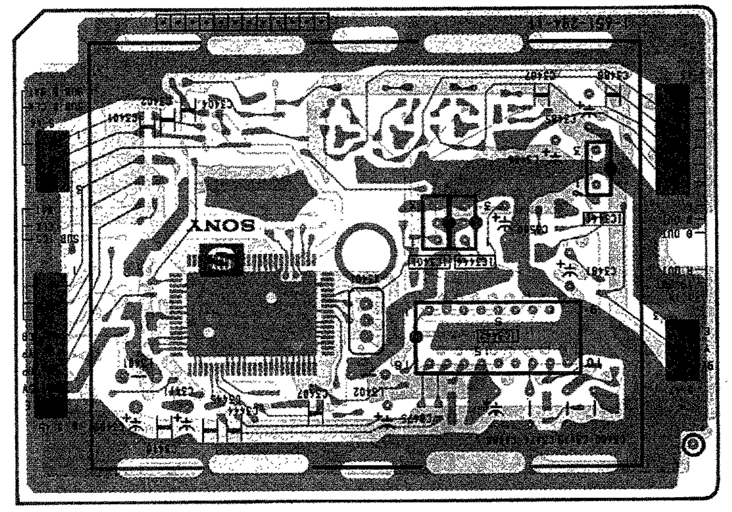
IC	
IC001	B – 3
IC002	D – 2, E – 2
TRANSISTOR	
Q001	G – 5
Q002	F – 5
Q003	F – 4
Q004	E – 4
Q005	E – 3
Q006	E – 3
Q007	F – 3
Q008	F – 4
Q009	G – 1
Q010	H – 1
Q011	F – 1
Q012	C – 5
Q013	A – 5
Q014	C – 4
DIODE	
D001	H – 5
D002	H – 5
D009	F – 5
D010	A – 4
D011	D – 2
D012	B – 4
D014	A – 1
D015	B – 4

Note :
- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

– S BOARD – (Component Side)

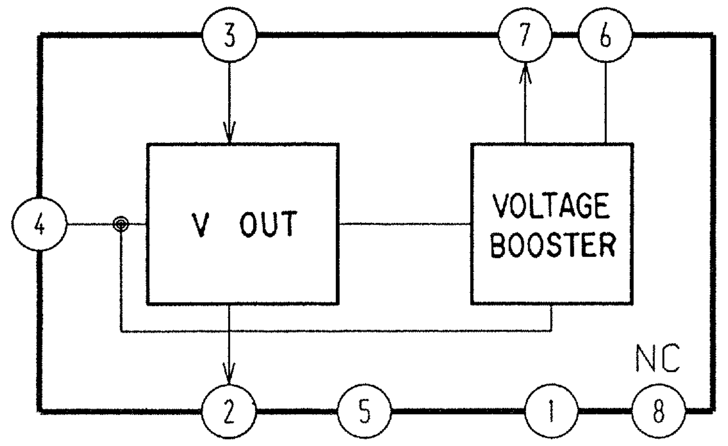


(Conductor Side)

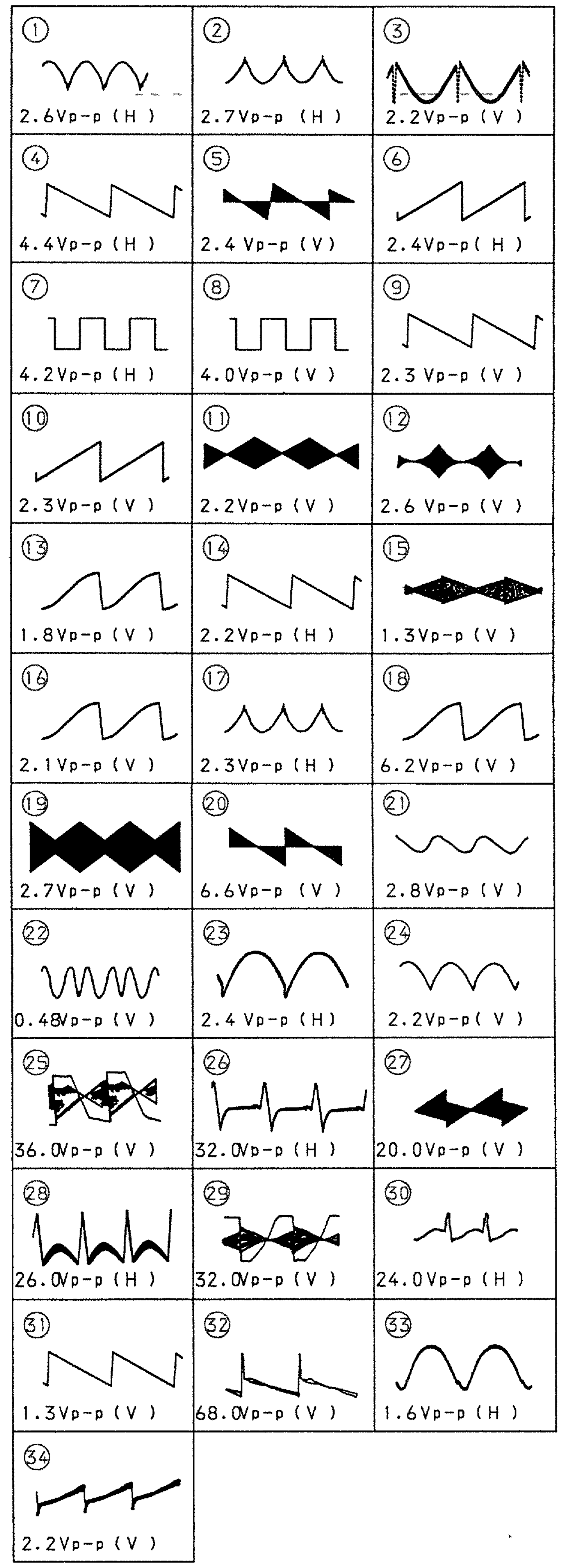


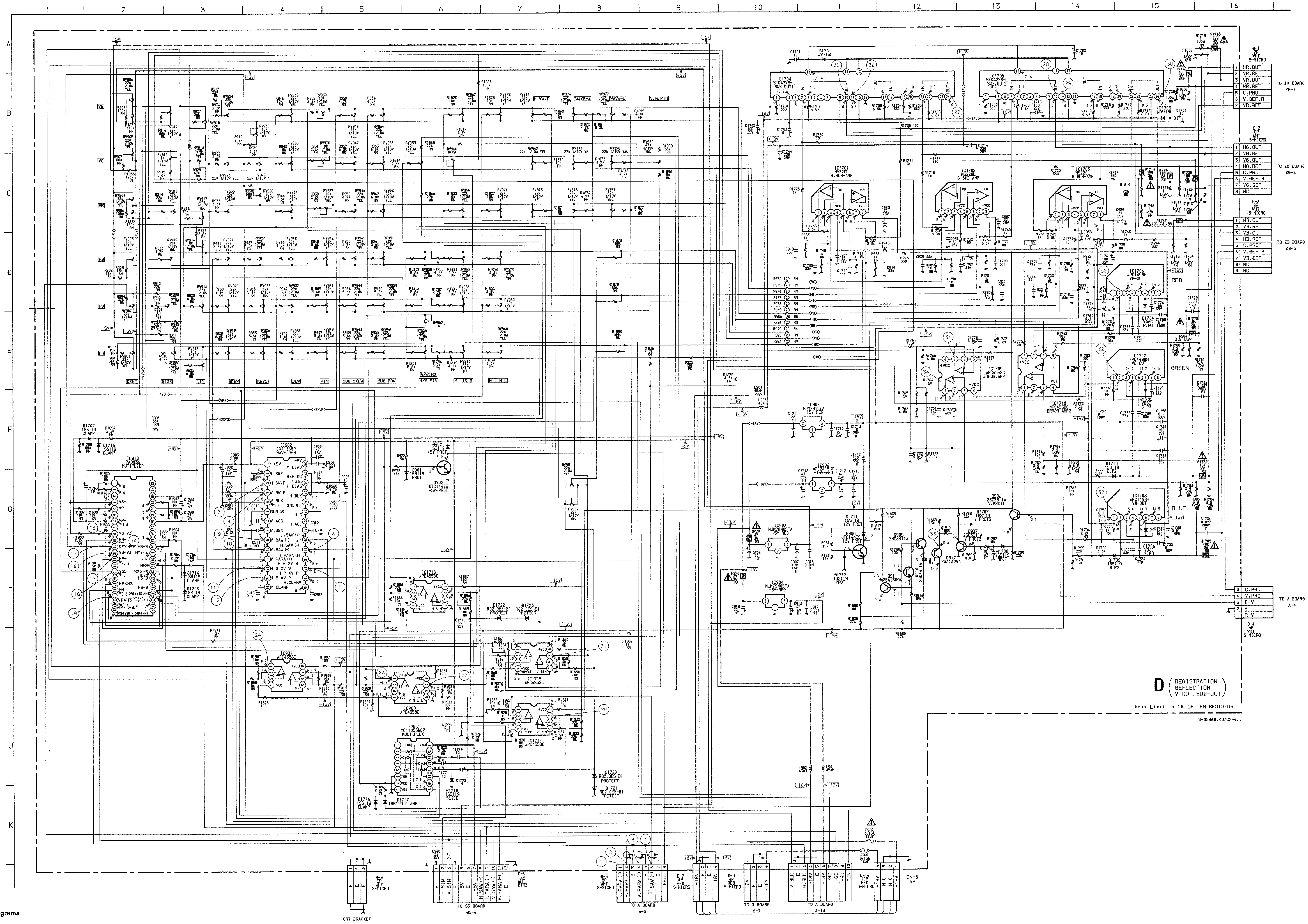
Note :
- ▨ : Pattern from the side which enables seeing.
- ■ : Pattern of the rear side.

D BOARD IC1706, 1707, 1708 μ PC1498H


3
7
6
4
V OUT
VOLTAGE BOOSTER
NC
2
5
1
8

• D BOARD WAVEFORMS




IC1704 STK4276-L SUB OUT1
IC1705 STK4276-L SUB OUT2
IC1701 μPC4570C R SUB-AMP
IC1702 μPC4570C G SUB-AMP
IC1703 μPC4570C B SUB-AMP
IC1706 μPC1498H VR-OUT
IC1707 μPC1498H VG-OUT
IC1708 μPC1498H VB-OUT
IC1709 μPC4558C ERROR AMP1
IC1710 μPC4558C ERROR AMP2
IC910 PA0036 MULTIPLIER
IC902 CXA1126P WAVE GEN
IC905 NJM78M15FA +15V-REG
IC906 μPC78M05H +5V-REG
IC903 NJM78M05FA +5V-REG
IC904 NJM79M05FA -5V-REG
IC901 μPC4558C
IC908 μPC4558C
IC907 MC14053BCP MULTIPLEX
IC1714 μPC4558C
IC1715 μPC4558C
IC1716 μPC4558C
TO ZR BOARD ZR-1
TO ZG BOARD ZG-2
TO ZB BOARD ZB-3
TO A BOARD A-4
TO GS BOARD GS-6
CRT BRACKET
TO A BOARD A-5
TO G BOARD G-7
TO A BOARD A-14
CN-8 4P
RED
GREEN
BLUE
CENT
SIZE
LIN
SKEW
KEYS
BOW
PIN
SUB SKEW
SUB BOW
V/WIND
H/M PIN
M L/N S
M L/N L

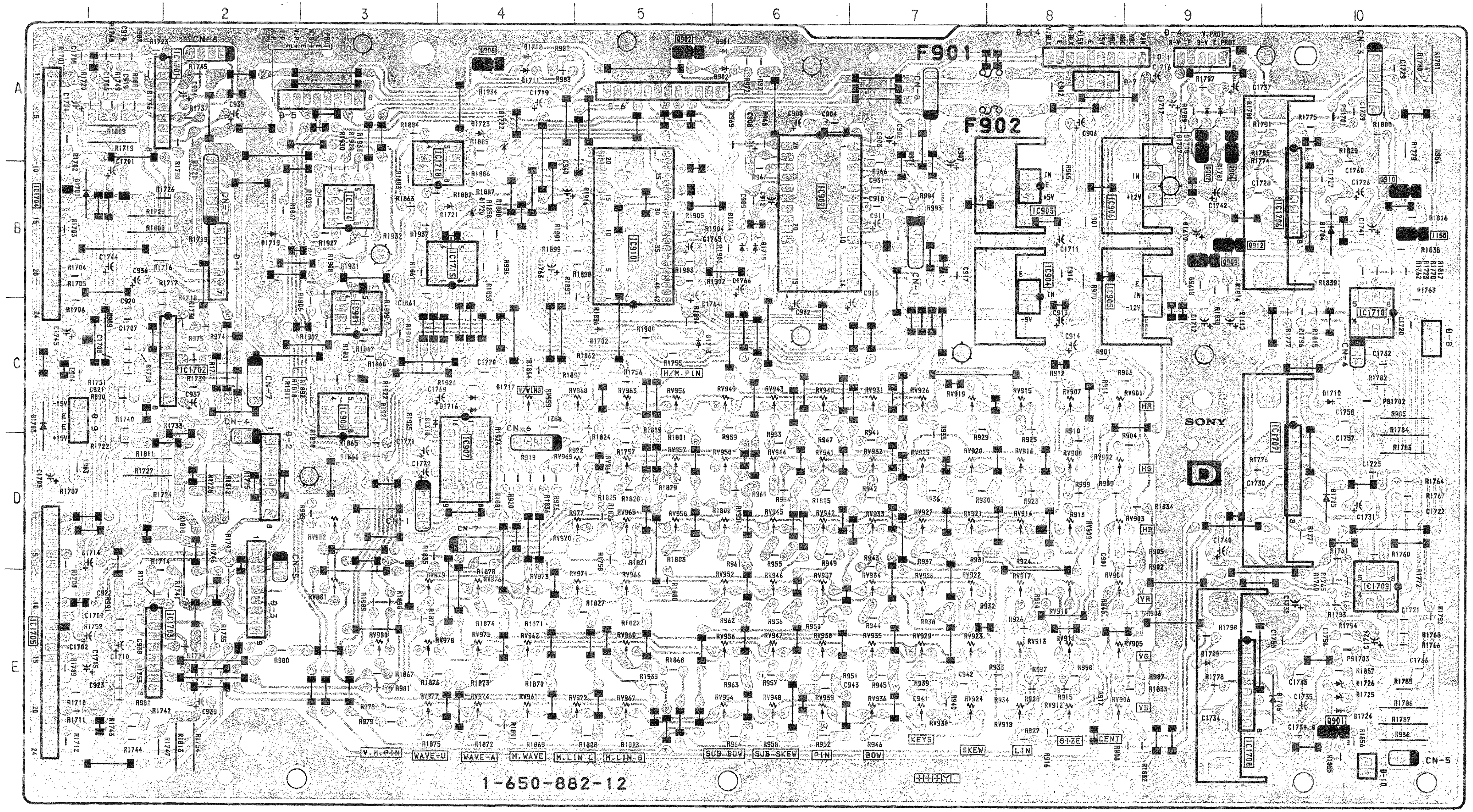
D (REGISTRATION
DEFLECTION
V-OUT, SUB-OUT)

note Limit is 1% OF RN RESISTOR

B-55368.<U/C>-D..

D [REGISTRATION, DEFLECTION, V- OUT, SUB-OUT]

– D BOARD –


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F901
F902
IC902
IC910
IC907
IC908
IC901
IC1714
IC1715
IC1718
IC1702
IC1701
IC1703
IC1704
IC1705
IC1706
IC1707
IC1708
IC1709
IC1710
IC903
IC904
IC905
IC906
Q901
Q906
Q907
Q908
Q909
Q910
Q911
Q912
CN-1
CN-2
CN-3
CN-4
CN-5
CN-6
CN-7
H/M.PIN
V.M.PIN
WAVE-U
WAVE-A
M.WAVE
M.LIN C
M.LIN S
SUB-BOW
SUB-SKEW
PIN
BOW
KEYS
SKEW
LIN
SIZE
CENT
HR
HB
VR
VB
V.WIND
SONY
D
1-650-882-12

D BOARD

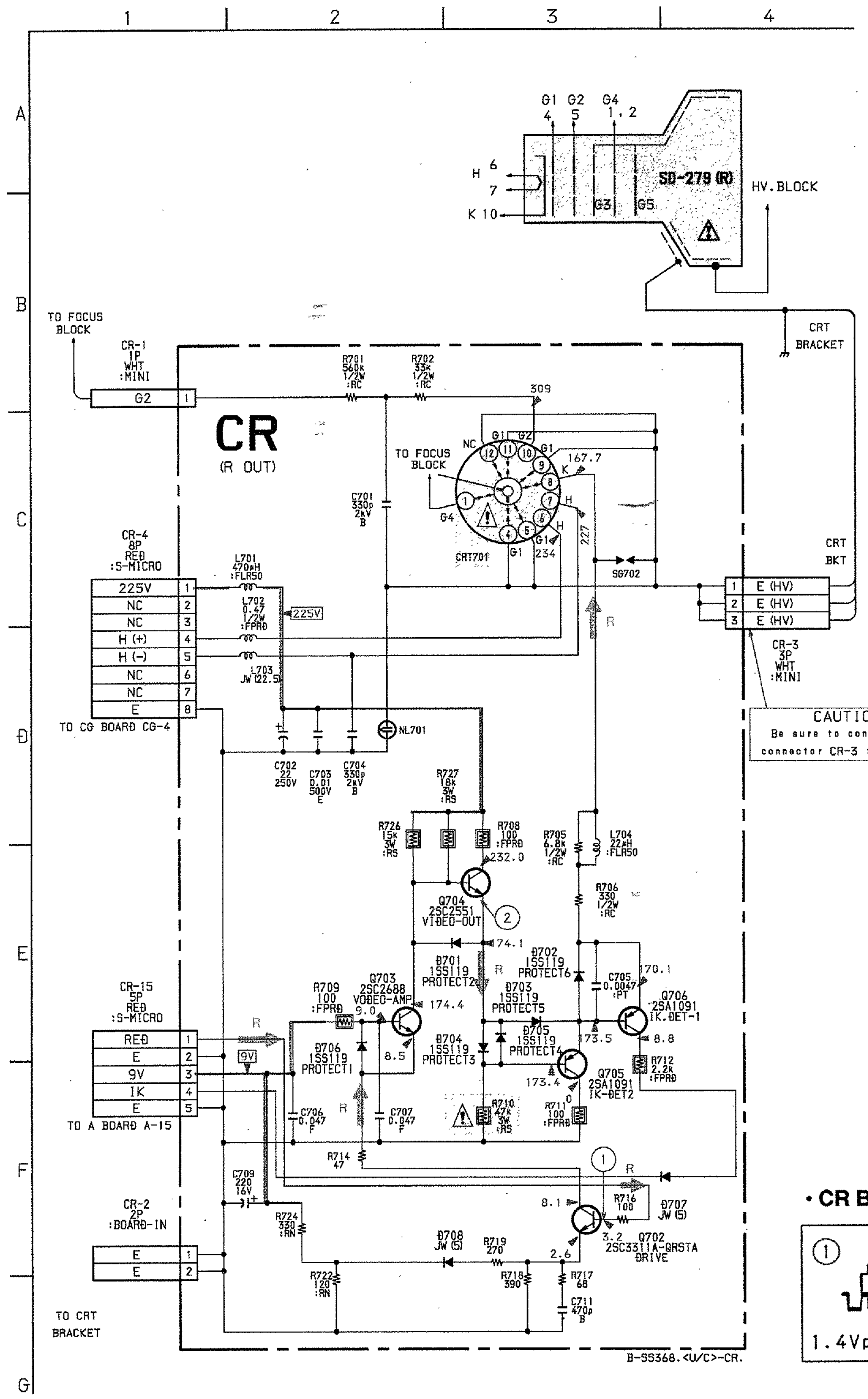
IC	
IC901,	C – 3
IC902	B – 6
CI903	B – 8
IC904	B – 8
IC905	B – 9
IC906	B – 9
IC907	D – 4
IC908	C – 3
IC910	B – 5
IC1701	A – 2
IC1702	C – 2
IC1703	E – 1
IC1704	B – 1
IC1705	E – 1
IC1706	B – 10
IC1707	D – 10
IC1708	E – 9
IC1709	E – 10
IC1710	C – 10
IC1714	B – 3
IC1715	B – 4
IC1718	B – 4

TRANSISTOR	
Q209	A – 5
Q906	A – 9
Q907	A – 9
Q908	A – 4
Q909	B – 9
Q910	B – 10
Q911	B – 10
Q912	B – 9

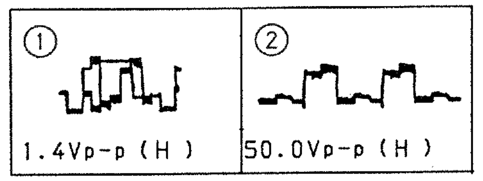
DIODE	
D1701	B – 1
D1702	C – 5
D1703	C – 1
D1704	B – 10
D1705	D – 10
D1706	E – 10
D1707	A – 9
D1708	A – 9
D1709	E – 9
D1710	C – 10
D1711	A – 4
D1712	A – 4
D1713	C – 5
D1714	B – 6
D1715	B – 6
D1716	C – 4
D1717	C – 4
D1718	C – 3
D1720	B – 4
D1721	B – 4
D1722	A – 4
D1723	A – 4

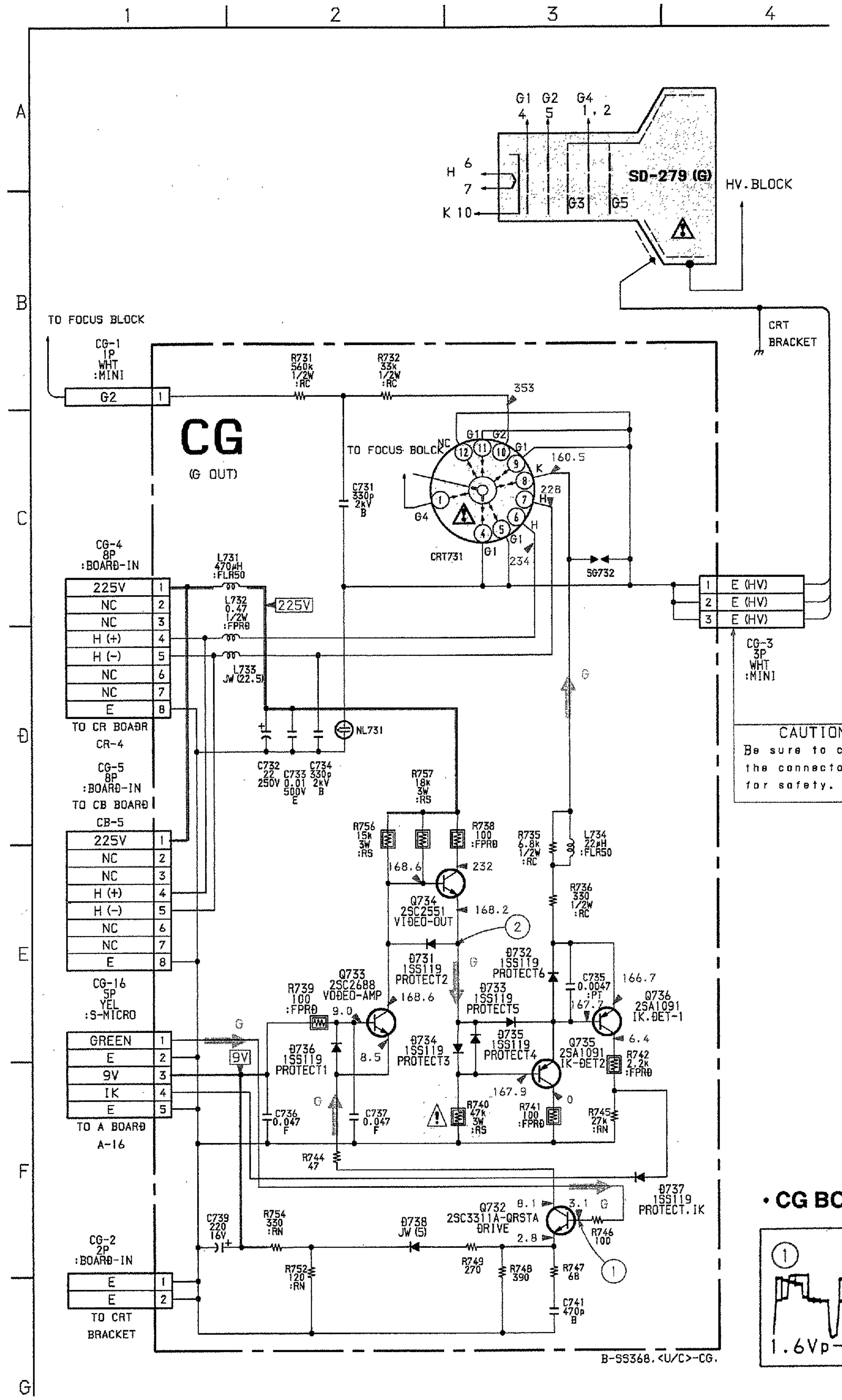
VARIABLE RESISTOR	
RV901	C – 8
RV902	D – 8
RV903	D – 8
RV904	E – 8
RV905	E – 8
RV906	E – 8
RV907	C – 8
RV908	D – 8
RV909	D – 8
RV910	E – 8
RV911	E – 8
RV912	E – 8
RV913	E – 8
RV914	D – 8
RV915	C – 8
RV916	D – 8
RV917	E – 8
RV918	E – 8
RV919	C – 7
RV920	D – 7
RV921	D – 7
RV922	E – 7
RV923	E – 7
RV924	E – 7
RV925	D – 7
RV926	C – 7
RV927	D – 7
RV928	E – 7
RV929	E – 7
RV930	E – 7
RV931	C – 7
RV932	D – 7
RV933	D – 7
RV934	E – 7
RV935	E – 7
RV936	E – 7
RV937	E – 6
RV938	E – 6
RV939	E – 6
RV940	C – 6
RV941	D – 6
RV942	D – 6
RV943	C – 6
RV944	D – 6
RV954	D – 6
RV946	E – 6
RV947	E – 6
RV948	E – 6
RV949	C – 9
RV950	D – 6
RV951	D – 6
RV952	E – 6
RV953	E – 6
RV954	E – 6
RV956	C – 5
RV957	D – 5
RV958	D – 5
RV959	C – 4
RV960	E – 5
RV961	E – 4
RV962	E – 4
RV963	C – 5
RV964	D – 5
RV965	D – 5
RV966	E – 5
RV967	E – 5
RV968	C – 5
RV969	D – 5
RV970	D – 5
RV971	E – 5
RV972	E – 5
RV973	E – 4
RV974	E – 4
RV975	E – 4
RV976	E – 4
RV977	E – 3
RV978	E – 3
RV979	E – 3
RV980	E – 3
RV981	E – 3
RV982	D – 3

Schematic diagrams
CB CG CR boards ➡

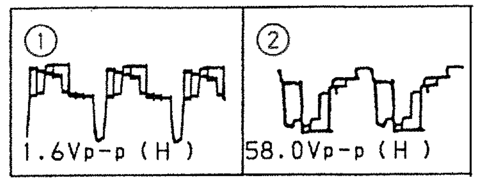

CR
(R OUT)
SD-279 (R)
HV.BLOCK
CRT BRACKET
TO FOCUS BLOCK
CRT701
CR-4 8P RED :S-MICRO
225V
NC
H (+)
H (−)
E
TO CG BOARD CG-4
CR-3 3P WHT :MINI
E (HV)
CAUTION
Be sure to connect the connector CR-3 for safety
Q704 2SC2551 VIDEO-OUT
Q703 2SC2688 VIDEO-AMP
Q705 2SA1091 IK-DET2
Q706 2SA1091 IK-DET-1
Q702 2SC3311A-QRSTA DRIVE
CR-15 5P RED :S-MICRO
RED
9V
IK
TO A BOARD A-15
CR-2 2P :BOARD-IN
TO CRT BRACKET
B-SS368.<U/C>-CR.

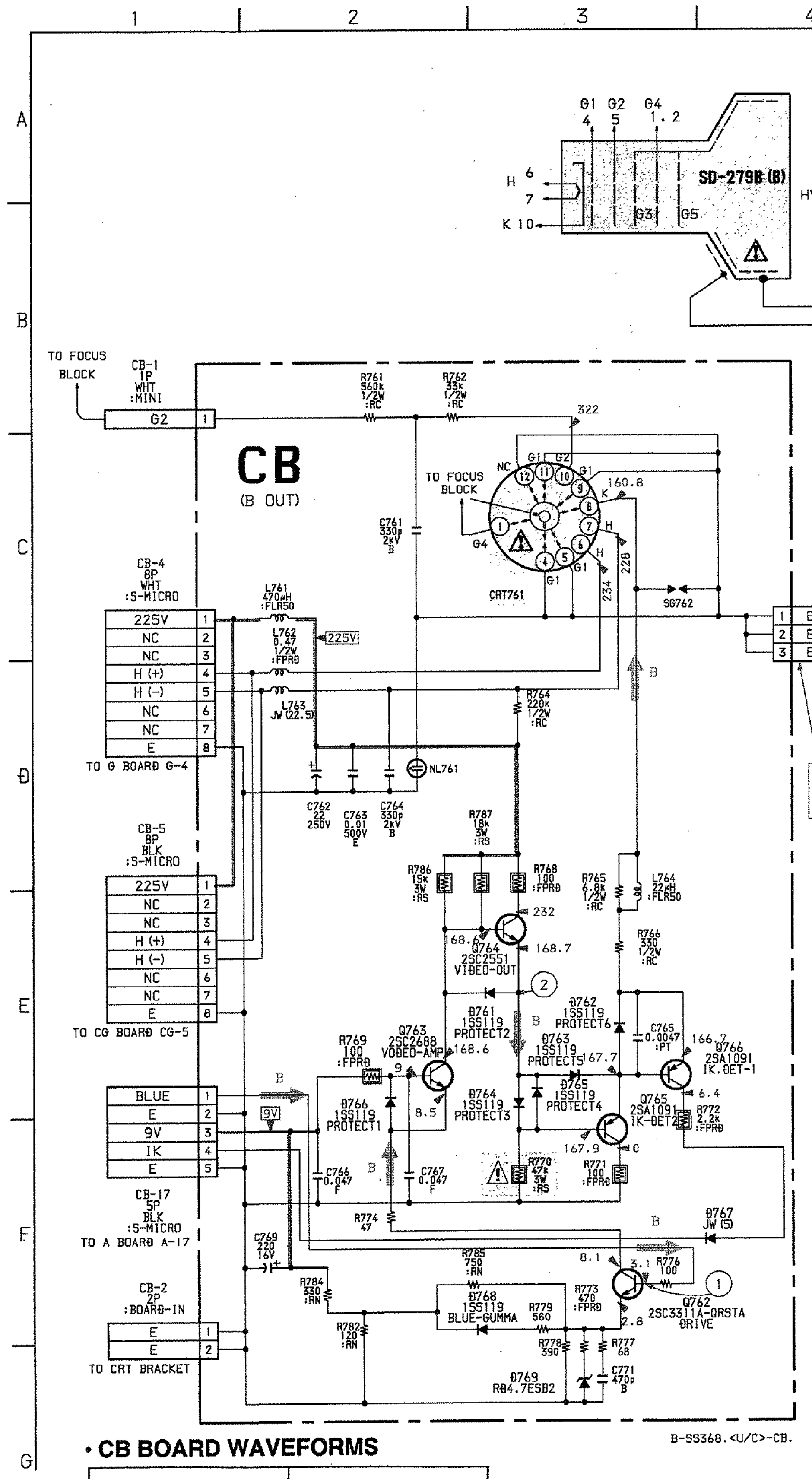
• CR BOARD WAVEFORMS



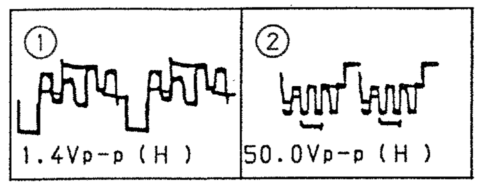

CG
(G OUT)
SD-279 (G)
HV.BLOCK
CRT BRACKET
TO FOCUS BLOCK
CRT731
CG-4 8P :BOARD-IN
225V
NC
H (+)
H (−)
E
TO CR BOARD CR-4
CG-5 8P :BOARD-IN
TO CB BOARD CB-5
CG-3 3P WHT :MINI
E (HV)
CAUTION
Be sure to connect the connector CG-3 for safety.
Q734 2SC2551 VIDEO-OUT
Q733 2SC2688 VIDEO-AMP
Q735 2SA1091 IK-DET2
Q736 2SA1091 IK-DET-1
Q732 2SC3311A-QRSTA DRIVE
CG-16 5P YEL :S-MICRO
GREEN
9V
IK
TO A BOARD A-16
CG-2 2P :BOARD-IN
TO CRT BRACKET
B-SS368.<U/C>-CG.

• CG BOARD WAVEFORMS



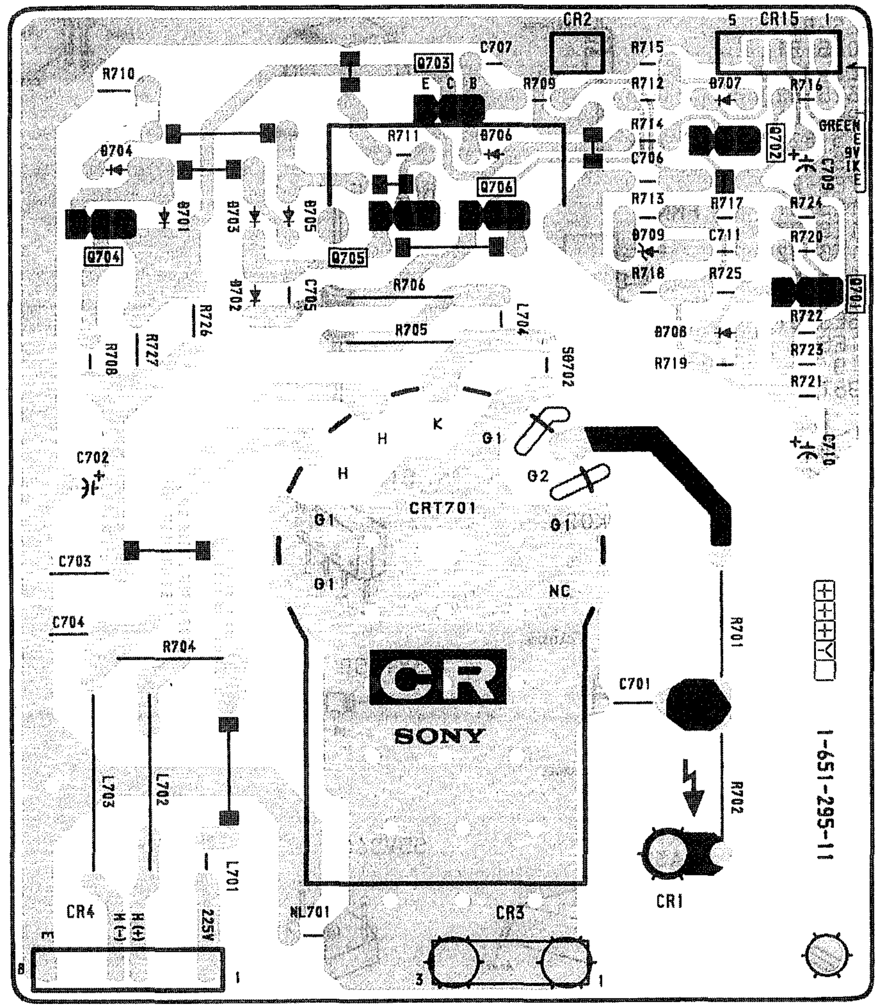

CB
(B OUT)
SD-279B (B)
HV.BLOCK
CRT BRACKET
TO FOCUS BLOCK
CRT761
CB-4 8P WHT :S-MICRO
225V
NC
H (+)
H (−)
E
TO G BOARD G-4
CB-5 8P BLK :S-MICRO
TO CG BOARD CG-5
CB-3 3P WHT :MINI
E (HV)
CAUTION
Be sure to connect the connector CB-3 for safety
Q764 2SC2551 VIDEO-OUT
Q763 2SC2688 VIDEO-AMP
Q765 2SA1091 IK-DET2
Q766 2SA1091 IK-DET-1
Q762 2SC3311A-QRSTA DRIVE
Q768 1SS119 BLUE-GUMMA
CB-17 5P BLK :S-MICRO
BLUE
9V
IK
TO A BOARD A-17
CB-2 2P :BOARD-IN
TO CRT BRACKET
B-SS368.<U/C>-CB.

• CB BOARD WAVEFORMS

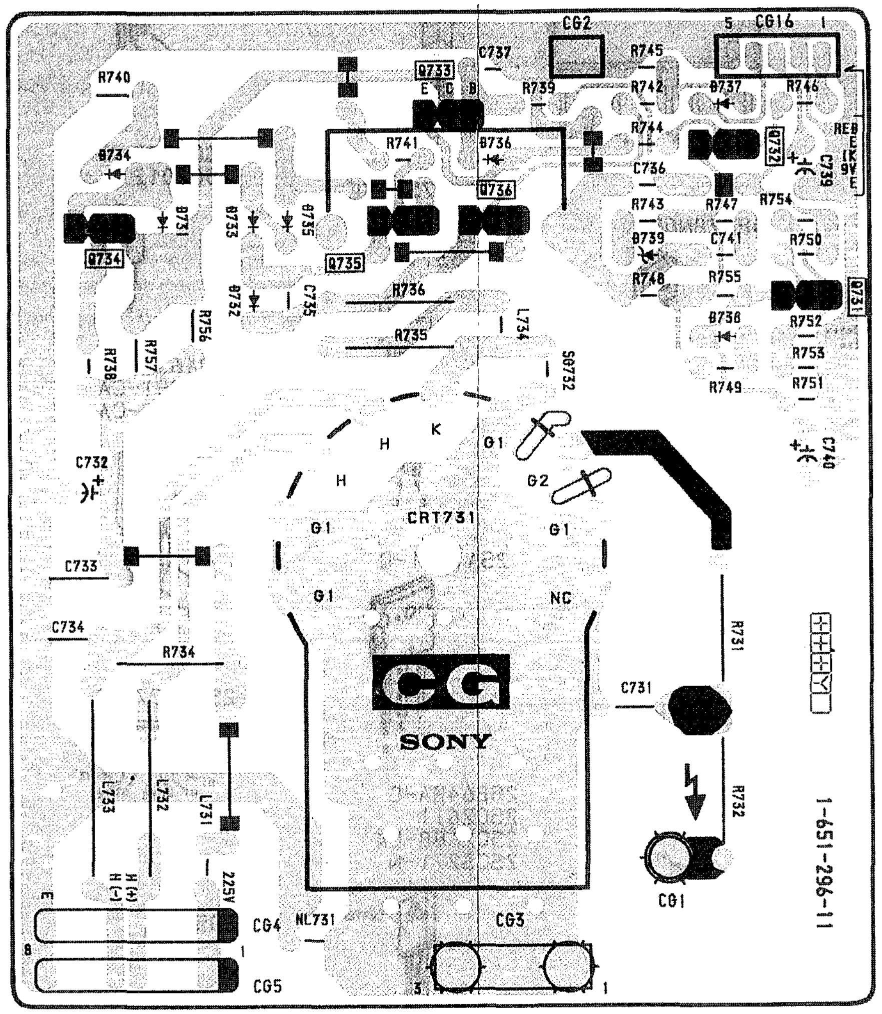


CR [R OUT] **CG** [G OUT] **CB** [B OUT]

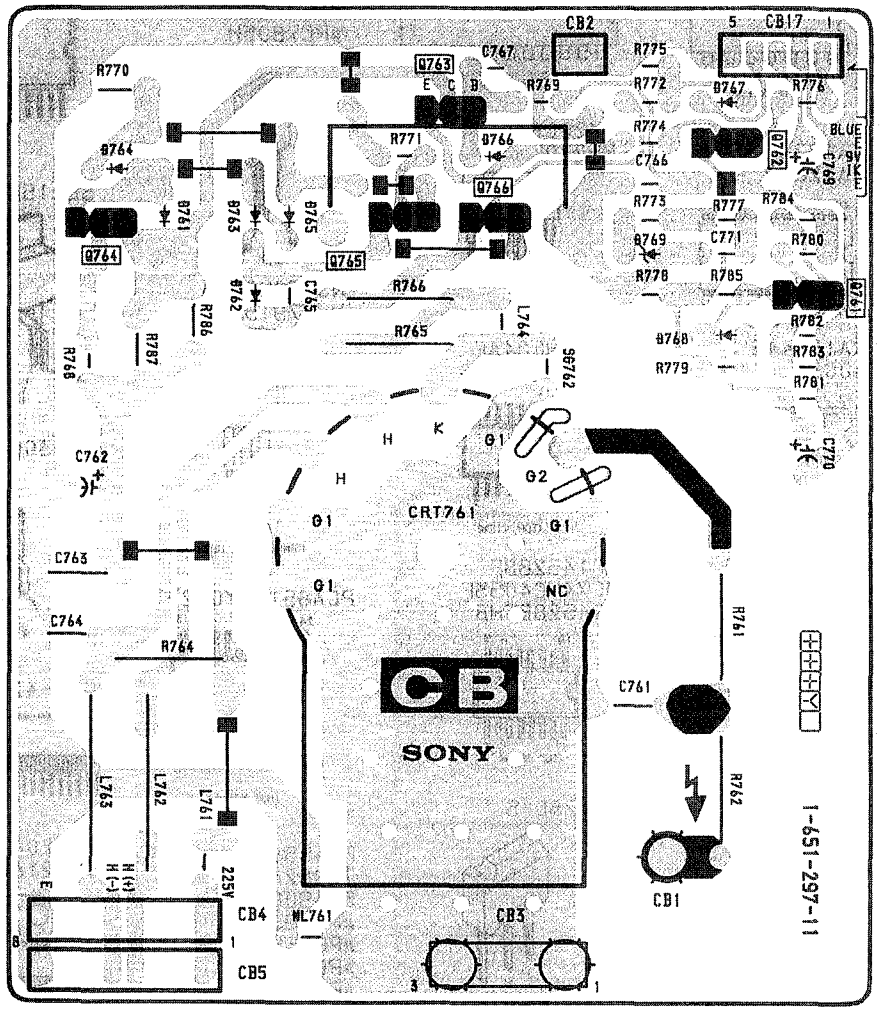
– CR BOARD –


CR2
CR15
CRT701
CR
SONY
CR1
CR3
CR4
NL701
1-651-295-11
Q701
Q702
Q703
Q704
Q705
Q706
GREEN
9V
IK
E
H(+)
H(-)
225V
H
K
G1
G2
NC

– CG BOARD –

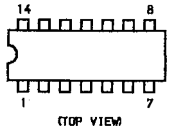

CG2
CG16
CRT731
CG
SONY
CG1
CG3
CG4
CG5
NL731
1-651-296-11
Q731
Q732
Q733
Q734
Q735
Q736
RED
9V
IK
E
H(+)
H(-)
225V
H
K
G1
G2
NC

– CB BOARD –

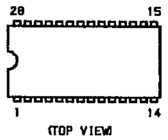

CB2
CB17
CRT761
CB
SONY
CB1
CB3
CB4
CB5
NL761
1-651-297-11
Q761
Q762
Q763
Q764
Q765
Q766
BLUE
9V
IK
E
H(+)
H(-)
225V
H
K
G1
G2
NC

6-5. SEMICONDUCTONS

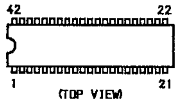
CA0007AD
LM324N
MB3614
μPC1394C


14
8
1
7
(TOP VIEW)

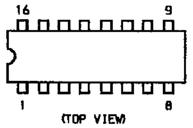
CXA1228S
CXA1268P


28
15
1
14
(TOP VIEW)

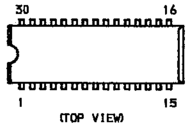
CXA1264AS
PA0036


42
22
1
21
(TOP VIEW)

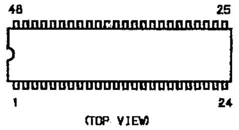
CXA1315M
CXA1315P
MC141053BCP
μPD4053BC


16
9
1
8
(TOP VIEW)

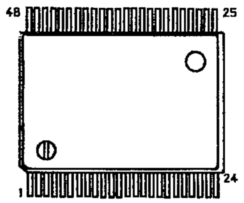
CXA1387S


30
16
1
15
(TOP VIEW)

CXA1464AS


48
25
1
24
(TOP VIEW)

CXA154AS



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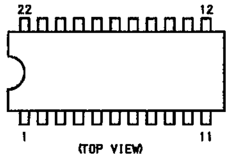
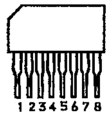
LA7945


22
12
1
11
(TOP VIEW)

CX20061
M5220L



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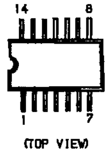
SN74HC05ANS


14
8
1
7
(TOP VIEW)

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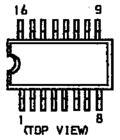
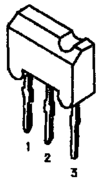
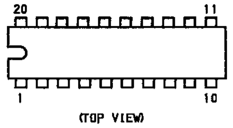
TC4528BFHB


16
9
1
8
(TOP VIEW)

MN1280-S



M52678P
TA8184P
TDA3769


20
11
1
10
(TOP VIEW)

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TA7812S
μPC2415HF
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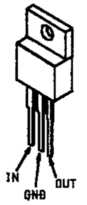
μPC7812H



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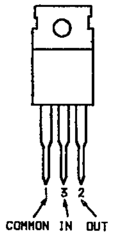
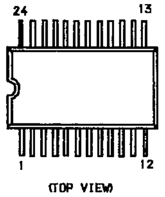
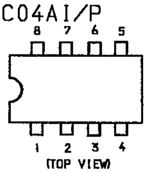

1
3
2
COMMON
IN
OUT

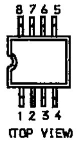
PCA8510T/012-T


24
13
1
12
(TOP VIEW)

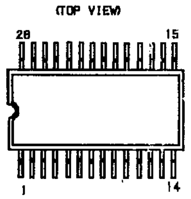
RC4558P
TL082ACP
SDA9086-3
μPC393C
μPC4557C
μPC4082C
μPC4558C
24C04AI/P


8 7 6 5
1 2 3 4
(TOP VIEW)

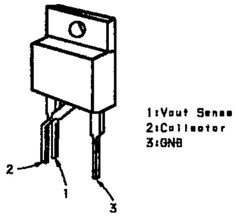
RC4558PS
μPC4558G2


8765
1234
(TOP VIEW)

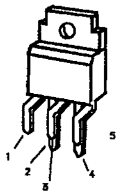
SDA9187X
SDA9188X


(TOP VIEW)
28
15
1
14

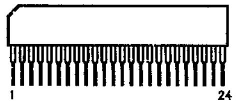
SE115N


1:Vout Sense
2:Collector
3:GND
2
1
3

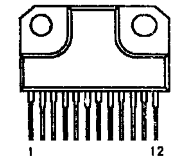
SI-3090CA



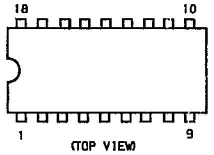
STK-4278L



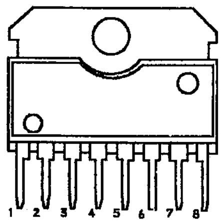
TA8200AH
TA8216H



TDA2595/V9
Z8612812PSC


18
10
1
9
(TOP VIEW)

μPC1498H



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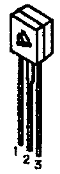

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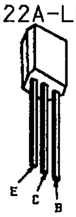
2SC3622A-LK



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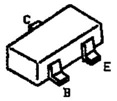
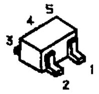
2SA1037K
2SA1162-G
2SC1623-L5L6
2SC2412K-QR
2SD601A-Q



FMW1



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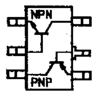
IMZ1



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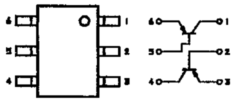
6
5
4
1
2
3
6
5
4
1
2
3

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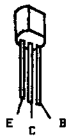
2SA1091-O
2SA1208-S
2SA1837
2SC2551-O
2SD788-S



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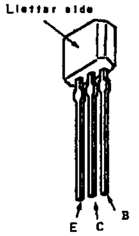
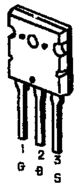
2SC3311A


Letter side
E
C
B

2SA1301-O



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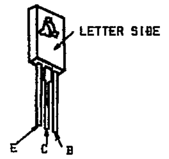
2SC3271-N


LETTER SIDE
E
C
B

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2SB1094-LK
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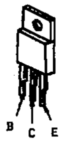
2SD1406-YGR



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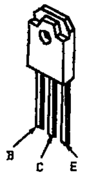

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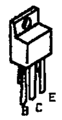

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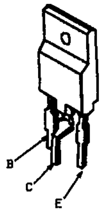

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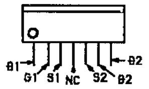
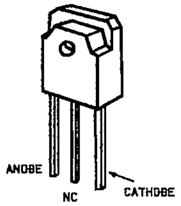
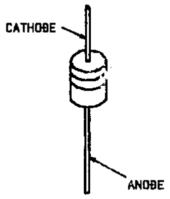

B1
G1
S1
NC
S2
B2
D2

DD50R


ANODE
NC
CATHODE

D1N20R
EGP10D
EGP10G
RB-100A
RD13ES-B1
RD13ES-B2
RD18ES-B2
RD2.0ES-B1
RD24ES-B3
RD3.3ES-B2
RD3.9ES-B1
RD33ES-B2
RD39ES-B2
RD4.7ES-B2
RD5.1ES-B1
RD5.1ES-B3
RD5.1ES-B2
RD5.6ES-B2
RD5.6ES-B1
RD7.5ES-B1
RD9.1ES-L
1SS119
1SS198TA


CATHODE
ANODE

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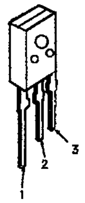

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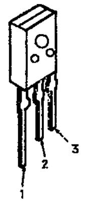
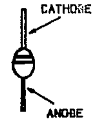


ERC38-06
V06C
V09G
V30N
V30N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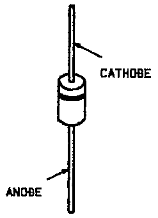
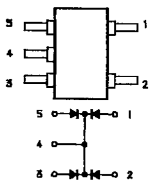
RU-1C
RU2AM


CATHODE
ANODE

FMN1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1
4
3
2

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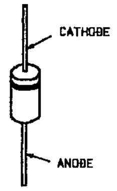
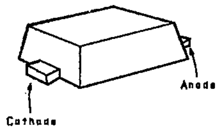
ERD28-08S
EL1Z
RGP10PKG23
RD27FB2
RU-3AM
SB140


CATHODE
ANODE

MA110
MA3130


Cathode
Anode

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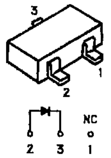
RD18M-B1
RD5.1M-B3



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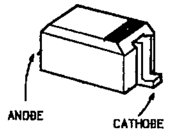
RD155SB
RD5.6S-B
RD6.2S-B
RD6.8M-B1


ANODE
CATHODE

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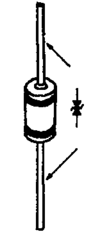

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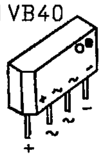

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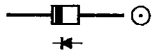
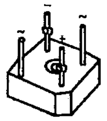
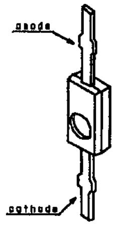


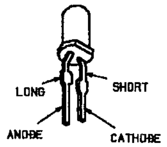
S5VB60



1T33


anode
cathode

TLR124


LONG
SHORT
ANODE
CATHODE

SECTION 7
EXPLODED VIEWS

NOTE:

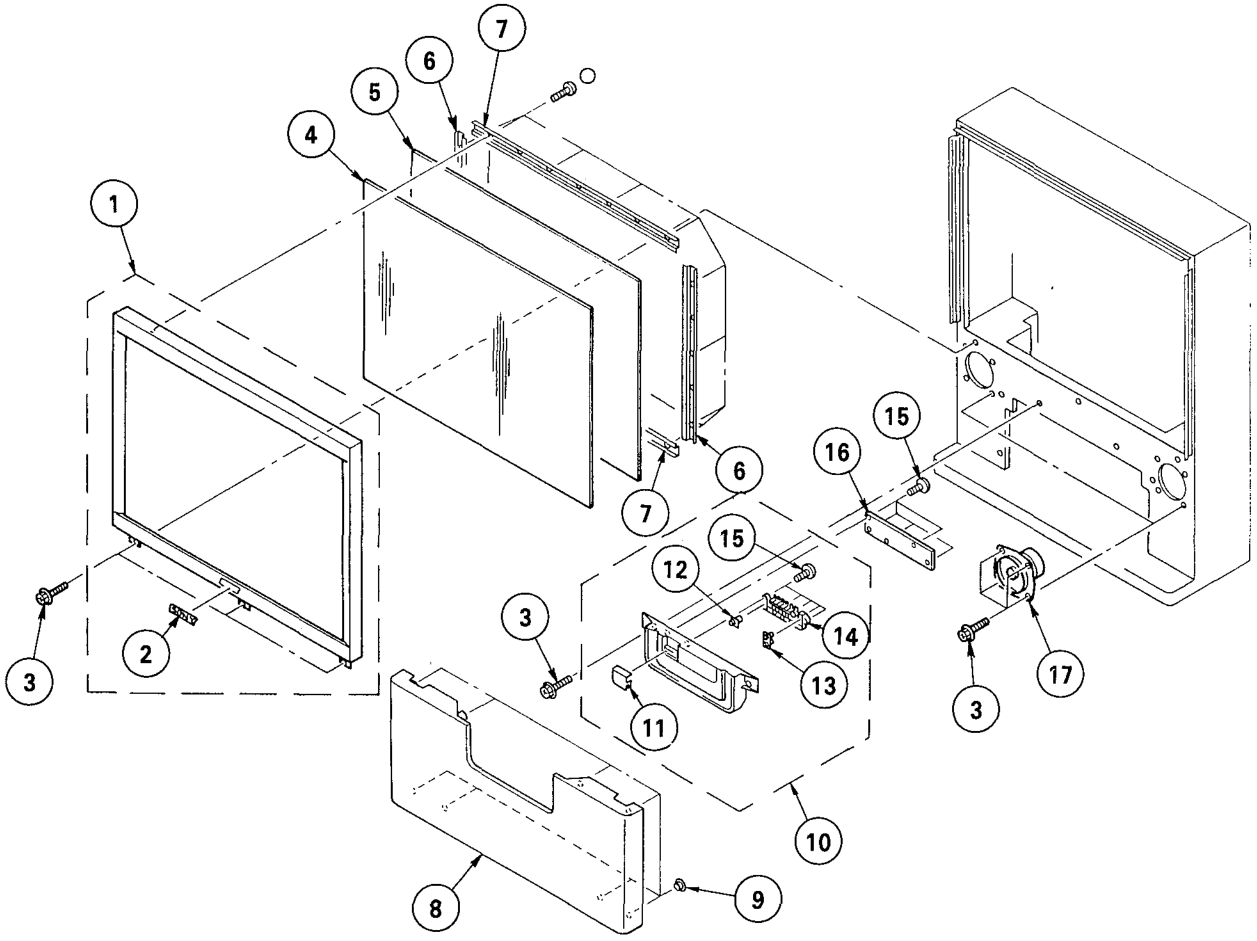
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

7-1-1. SCREEN FRAME AND CONTROL PANEL (KP-46S55 only)

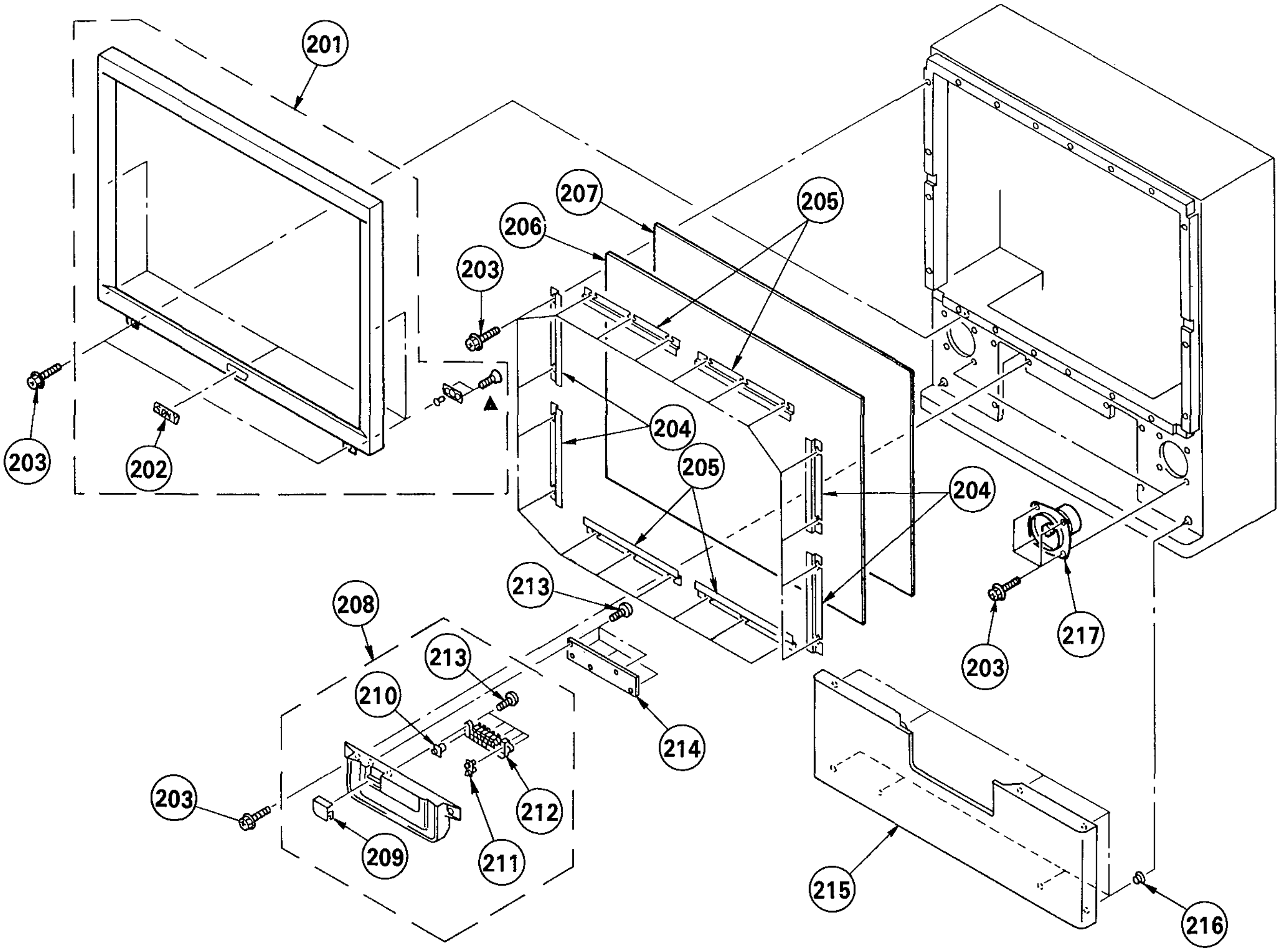
○ : BVTP4 × 12 7-685-661-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4031-693-1	FRAME ASSY, SCREEN	2
2	4-381-079-01	EMBLEM (NO.10), SONY	
3	4-041-164-11	SCREW (4X20), TAPPING	
4	4-037-360-11	PLATE (L), DIFFUSION	
5	4-037-359-11	PLATE (F), DIFFUSION	
6	*4-036-092-21	HOLDER (S), SCREEN	
7	*4-036-091-21	HOLDER (L), SCREEN	
8	X-4031-692-1	GRILLE ASSY (46), SPEAKER	
9	4-838-438-00	LATCH	
10	X-4031-690-1	PANEL ASSY, CONTROL	11-15
11	4-043-782-01	LID, CONTROL	
12	4-043-777-01	FILTER, REMOTE	
13	4-043-779-01	GUIDE, LED	
14	4-043-786-01	BUTTON, CONTROL	
15	4-041-165-01	SCREW (3X12), TAPPING, +BV	
16	*1-651-293-11	H BOARD	
17	1-504-533-11	SPEAKER (16CM)	

7-1-2. SCREEN FRAME AND CONTROL PANEL (KP-53S55 only)

▲ : KTP3 × 10 7-685-247-14


201
207
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202
▲
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213
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214
217
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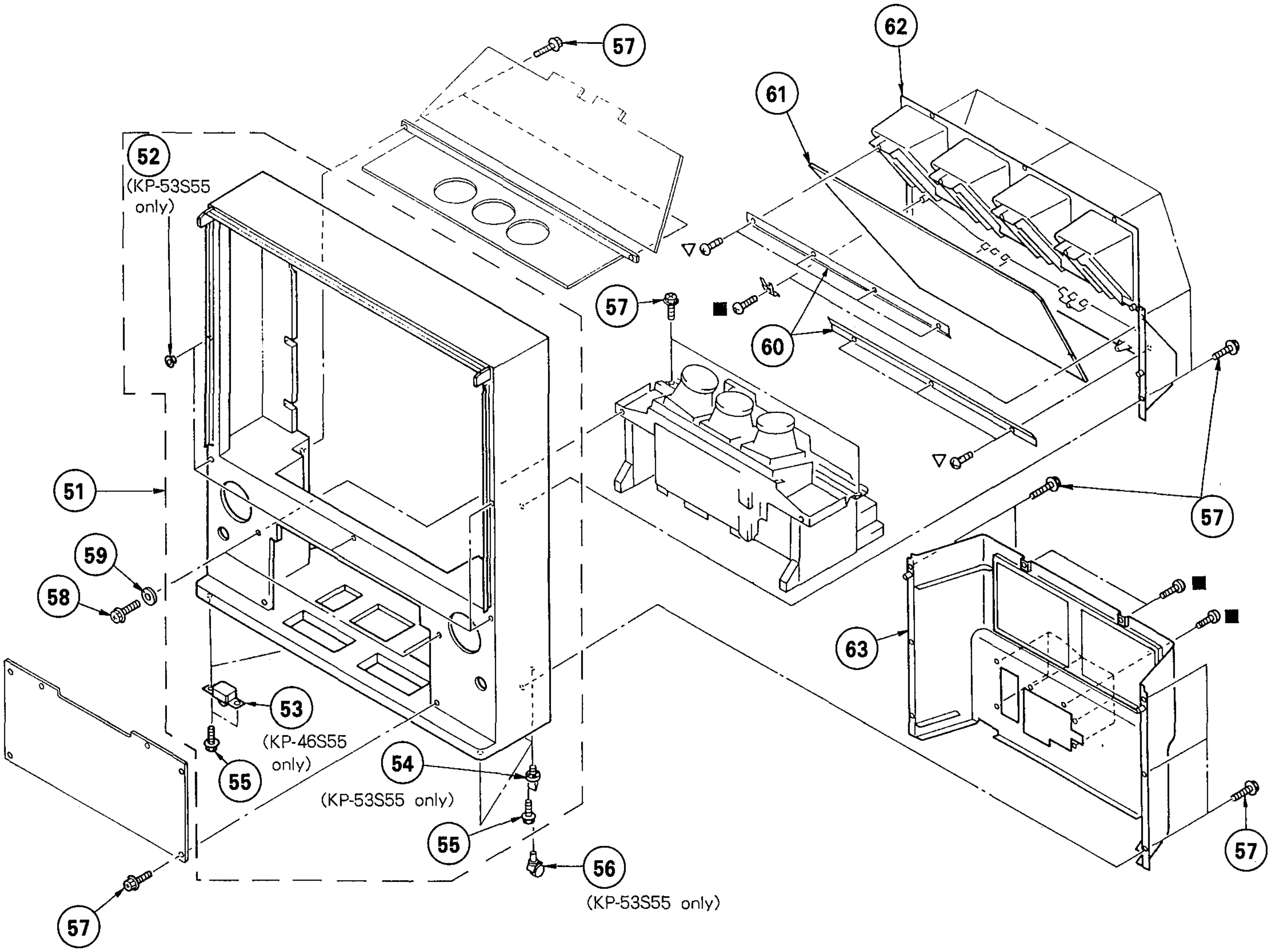
216

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
201	X-4031-764-1	FRAME ASSY, SCREEN	202	210	4-043-777-01	FILTER, REMOTE	
202	4-381-079-01	EMBLEM (NO.10), SONY		211	4-043-779-01	GUIDE, LED	
203	4-041-164-11	SCREW (4X20), TAPPING		212	4-043-786-01	BUTTON, CONTROL	
204	*4-036-499-11	HOLDER (S), SCREEN		213	4-041-165-01	SCREW (3X12), TAPPING, +BV	
205	*4-036-498-11	HOLDER (L), SCREEN		214	*1-651-293-11	H BOARD	
206	4-036-466-01	PLATE (L), DIFFUSION		215	X-4031-763-1	GRILLE ASSY, SPEAKER	
207	4-036-469-01	PLATE (F), DIFFUSION		216	4-838-438-00	LATCH	
208	X-4031-690-1	PANEL ASSY, CONTROL	209-213	217	1-504-533-11	SPEAKER (16CM)	
209	4-043-782-01	LID, CONTROL					

7-2. CABINET

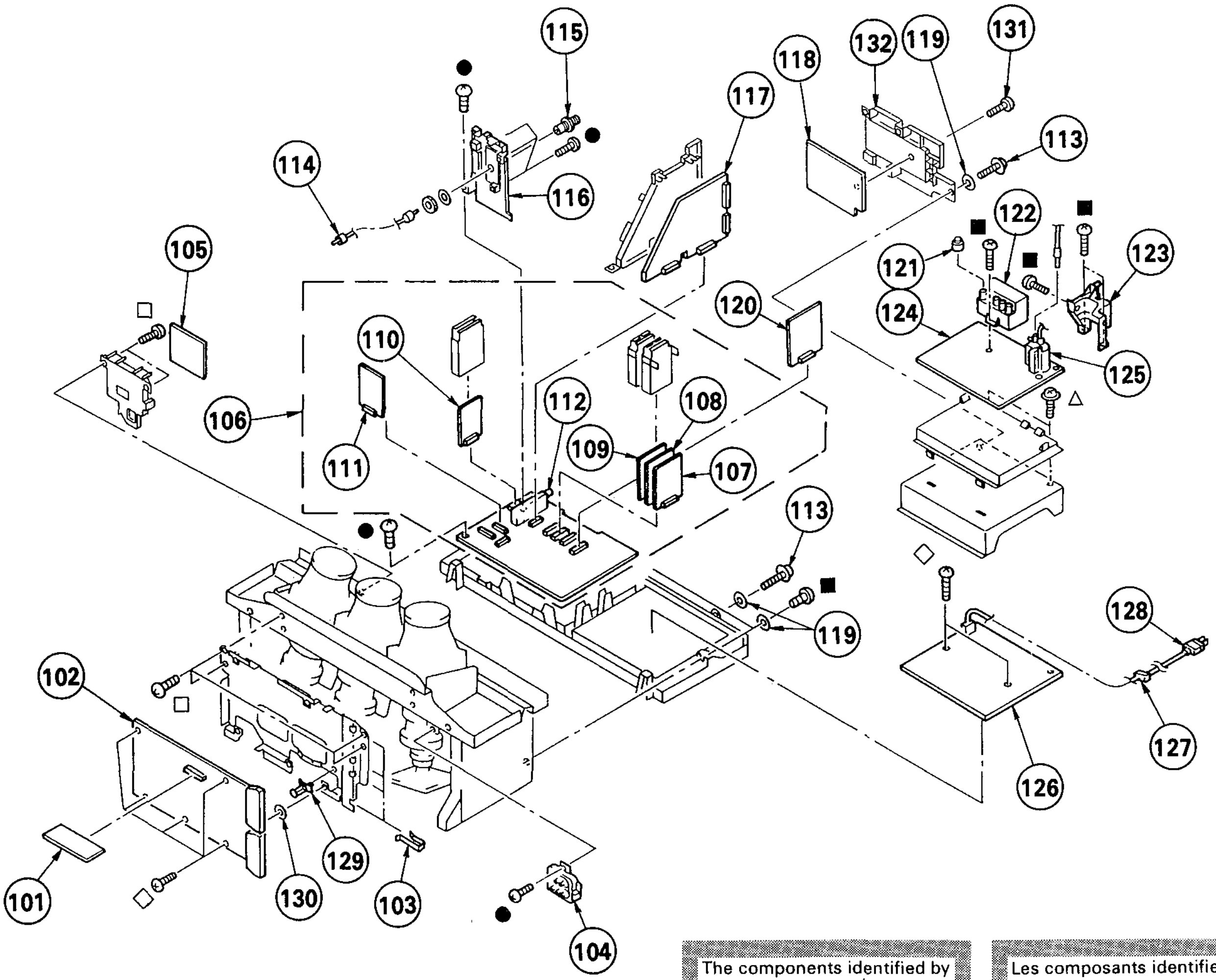
■ : TAPPING SCREW (DIA. 4 × 16) 3-703-251-11
▽ : TAPPING SCREW (DIA. 4 × 12) 3-703-251-21


57
62
61
52
(KP-53S55 only)
▽
57
■
60
▽
51
57
59
58
■
■
63
53
(KP-46S55 only)
55
54
(KP-53S55 only)
55
56
(KP-53S55 only)
57
57

REF.NO.	PART NO.	DESCRIPTION	REMARK
51	X-4031-691-1	CABINET ASSY (KP-46S55)	53,55
	X-4031-762-1	CABINET ASSY (KP-53S55)	52,54,55
52	4-838-438-00	LATCH (KP-53S55)	
53	4-040-755-01	CASTER (DIA. 30) (KP-46S55)	
54	4-030-850-01	SOCKET, CASTER (KP-53S55)	
55	4-041-164-01	SCREW (4X20), TAPPING	
56	4-032-343-11	CASTER (KP-53S55)	
57	4-041-164-11	SCREW (4X20), TAPPING	
58	4-378-522-11	SCREW, TAPPING, HEXAGON HEAD	
59	4-042-666-01	WASHER	
60	*4-037-351-01	HOLDER, MIRROR	
61	4-037-349-01	MIRROR (53), REFLECTION (KP-53S55)	
	4-037-534-01	MIRROR (46), REFLECTION (KP-46S55)	
62	4-036-462-01	COVER (46"), MIRROR (KP-46S55)	
	4-036-474-01	COVER (53"), MIRROR (KP-53S55)	
63	X-4030-549-1	COVER ASSY, BACK	

7-3. CHASSIS

● : BVTP3 × 12 7-685-648-79
□ : BVTP4 × 12 7-685-661-14
△ : PSW4 × 14 7-682-963-09
■ : TAPPING SCREW (DIA. 4 × 16) 3-703-251-11
◇ : WASHER HAED SCREW (+ P3 × 12) 4-302-428-03



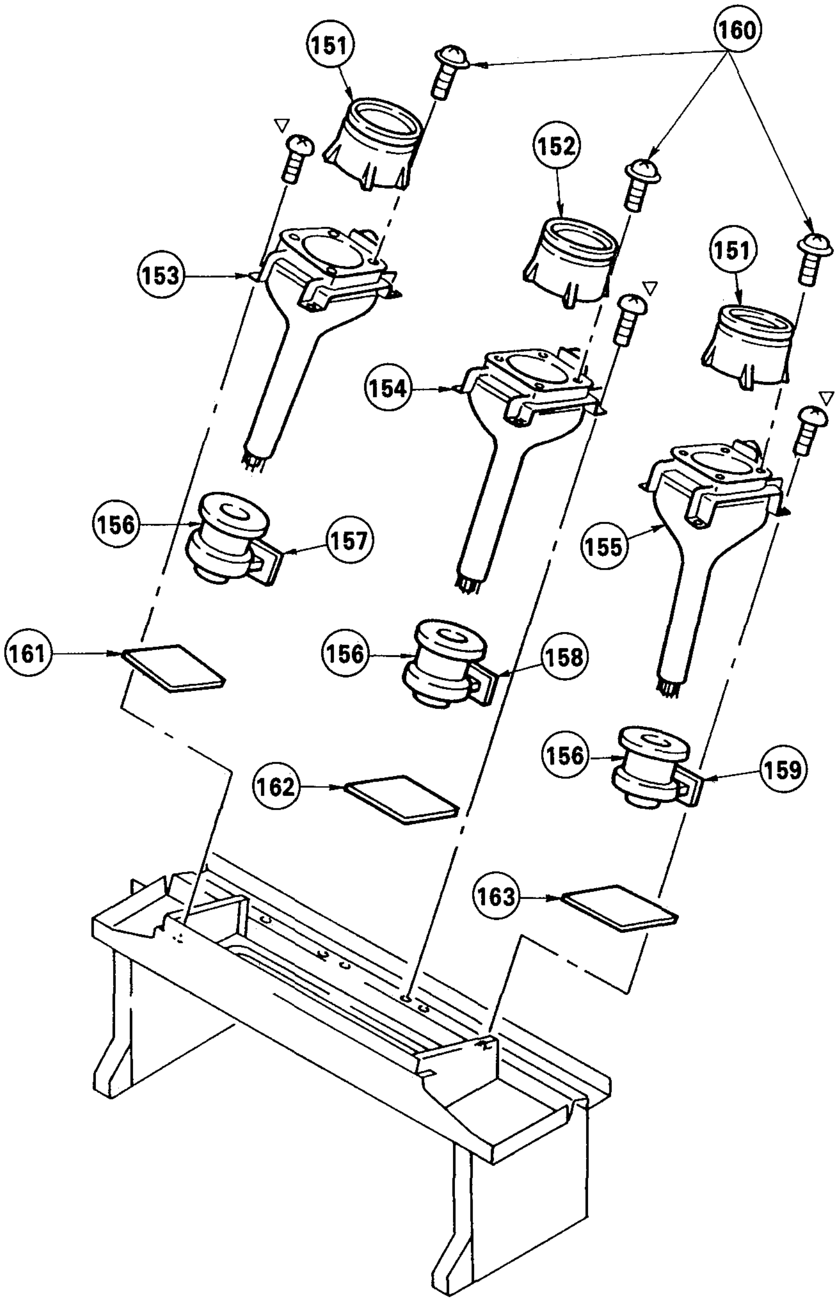
The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie

REF.NO.	PART NO.	DESCRIPTION	REMARK
101	*1-650-883-11	DS BOARD	
102	*A-1341-751-A	D BOARD, COMPLETE	
103	*4-393-401-11	SPRING, TRANSISTOR	
104	⚠1-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)	
105	*A-1394-535-A	S BOARD, COMPLETE	
106	*A-1297-238-A	A BOARD, COMPLETE (KP-53S55)	107-111
	*A-1297-239-A	A BOARD, COMPLETE (KP-46S55)	107-111
107	*A-1346-138-A	E1 BOARD, COMPLETE	
108	*A-1346-137-A	E2 BOARD, COMPLETE	
109	*A-1306-457-A	M BOARD, COMPLETE	
110	*A-1195-084-A	P1 BOARD, COMPLETE	
111	*A-1394-532-A	Y2 BOARD, COMPLETE	
112	⚠1-693-102-22	TUNER (BTF-XA401)	
113	3-701-810-91	SCREW, TERMINAL	
114	*1-555-400-00	CABLE, PIN	
115	1-561-306-00	JACK, PIN (F)	
116	4-036-137-01	PANEL, SUB CONNECTOR	
117	*A-1394-534-A	U BOARD, COMPLETE	
118	*A-1373-461-A	UT BOARD, COPMPLETE	
119	4-039-112-01	WASHER, WAVE (KP-46S55)	
	4-042-667-01	WASHER, WAVE (KP-53S55)	
120	*A-1373-463-A	V BOARD, COMPLETE	
121	4-373-137-01	CAP (Z), RUBBER	
122	⚠1-453-108-11	DC BLOCK, HIGH-VOLTAGE	
123	4-034-482-01	COVER, FBT	
124	*A-1390-415-A	N BOARD, COMPLETE	
125	⚠8-598-939-00	TRANSFORMER ASSY, FLYBACK (NX-2631//A4S)	
126	*A-1316-180-A	G BOARD, COMPLETE	
127	⚠4-388-328-12	GROMMET, AC CORD	
128	⚠1-696-002-12	CORD, POWER(WITH NOISE FILTER) 7.0A/125V	
129	*3-670-570-21	SPACER, SUPPORT	
130	4-866-147-00	WASHER	
131	4-041-165-01	SCREW (3X12), TAPPING, +BV	
132	4-036-138-01	PANEL, MAIN CONNECTOR	

7-4. PICTURE TUBE

▽ : TAPPING SCREW (DIA 4 × 12) 3-703-251-21



REF.NO.	PART NO.	DESCRIPTION	REMARK
151	4-034-057-01	LENS (LINNIT)	
152	4-034-057-11	LENS (LINNIT)	
153	⚠8-736-074-05	PICTURE TUBU 07MAB2(R)	
154	⚠8-736-072-05	PICTURE TUBU 07MAB2(G)	
155	⚠8-736-073-05	PICTURE TUBU 07MAB2(B)	
156	⚠8-451-441-11	DEFLECTION YOKE Y829PA	
157	*A-1390-412-A	ZR BOARD, COMPLETE	
158	*A-1390-413-A	ZG BOARD ,COMPLETE	
159	*A-1390-414-A	ZB BOARD, COMPLETE	
160	3-701-810-91	SCREW, TERMINAL	
161	*A-1331-337-A	CR BOARD, COMPLETE	
162	*A-1331-338-A	CG BOARD, COMPLETE	
163	*A-1331-339-A	CB BOARD, COMPLETE	

A

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : mH, UH : μH

- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1297-238-A	A BOARD, COMPLETE (KP-53S55)			
		*****************			
	*A-1297-239-A	A BOARD, COMPLETE (KP-46S55)			
		*****************			
	4-365-216-00	SPACER, MICA			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C201	1-124-910-11	ELECT	47MF	20%	50V
C202	1-124-903-11	ELECT	1MF	20%	50V
C203	1-130-495-00	MYLAR	0.1MF	5%	50V
C204	1-124-477-11	ELECT	47MF	20%	16V
C205	1-124-557-11	ELECT	1000MF	20%	25V
C206	1-126-101-11	ELECT	100MF	20%	16V
C207	1-124-286-00	ELECT	33MF	20%	16V
C210	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C212	1-126-803-11	ELECT	47MF	20%	16V
C213	1-126-103-11	ELECT	470MF	20%	16V
C214	1 126-101-11	ELECT	100MF	20%	16V
C215	1-126-803-11	ELECT	47MF	20%	50V
C216	1-126-101-11	ELECT	100MF	20%	16V
C217	1-126-803-11	ELECT	47MF	20%	25V
C218	1-126-103-11	ELECT	470MF	20%	16V
C219	1-124-443-00	ELECT	100MF	20%	10V
C220	1-126-803-11	ELECT	47MF	20%	25V
C223	1-126-803-11	ELECT	47MF	20%	25V
C224	1-124-907-11	ELECT	10MF	20%	50V
C225	1-124-120-11	ELECT	220MF	20%	16V
C227	1-124-621-11	ELECT	3300MF	20%	6.3V
C299	1-126-101-11	ELECT	100MF	20%	16V
C502	1-126-182-11	ELECT	0.47MF	20%	50V
C503	1-130-487-00	MYLAR	0.022MF	5%	50V
C507	1-106-383-00	MYLAR	0.047MF		200V
C508	1-102-973-00	CERAMIC	100PF	5%	50V
C509	1-102-030-00	CERAMIC	330PF	10%	500V
C510	⚠1-136-565-11	FILM	0.015MF	3%	1.4KV
C512	⚠1-136-598-11	FILM	3MF	5%	200V
C513	1-136-153-00	FILM	0.01MF	5%	50V
C514	1-124-477-11	ELECT	47MF	20%	16V
C522	1-123-024-21	ELECT	33MF		160V
C523	1-106-383-00	MYLAR	0.047MF		200V
C528	1-124-662-11	ELECT	220MF	20%	50V
C534	1-124-011-00	ELECT	220MF	20%	16V
C535	1-124-011-00	ELECT	220MF	20%	16V
C536	1-124-662-11	ELECT	220MF	20%	50V
C537	1-124-662-11	ELECT	220MF	20%	50V
C539	1-124-907-11	ELECT	10MF	20%	50V
C542	1-136-153-00	FILM	0.01MF	5%	50V
C543	1-136-153-00	FILM	0.01MF	5%	50V
C544	1-136-153-00	FILM	0.01MF	5%	50V
C545	1-136-153-00	FILM	0.01MF	5%	50V
C569	1-126-355-11	ELECT	33MF	20%	160V
C1401	1-124-910-11	ELECT	47MF	20%	50V
C1402	1-124-907-11	ELECT	10MF	20%	50V
C1403	1-124-907-11	ELECT	10MF	20%	50V
C1404	1-124-907-11	ELECT	10MF	20%	50V
C1405	1-124-910-11	ELECT	47MF	20%	50V
C1406	1-126-101-11	ELECT	100MF	20%	16V
C1407	1-126-057-11	ELECT	2200MF	20%	50V
C1408	1-136-165-00	FILM	0.1MF	5%	50V
C1409	1-136-165-00	FILM	0.1MF	5%	50V
C1413	1-126-233-11	ELECT	22MF	20%	25V
C1424	1-126-057-11	ELECT	2200MF	20%	50V
C1425	1-126-057-11	ELECT	2200MF	20%	50V
C1426	1-124-907-11	ELECT	10MF	20%	50V
C1429	1-126-101-11	ELECT	100MF	20%	16V
C1430	1-126-101-11	ELECT	100MF	20%	16V
C1431	1-124-916-11	ELECT	22MF	20%	50V
C1435	1-126-233-11	ELECT	22MF	20%	25V
C1440	1-126-336-11	ELECT	220MF	20%	25V
C1601	1-130-483-00	MYLAR	0.01MF	5%	50V
C1609	1-136-153-00	FILM	0.01MF	5%	50V
		<CONNECTOR>			
A1	*1-564-513-11	PLUG, CONNECTOR 10P			
A2	*1-564-512-11	PLUG, CONNECTOR 9P			
A3	*1-564-507-11	PLUG, CONNECTOR 4P			
A5	*1-564-511-11	PLUG, CONNECTOR 8P			
A9	*1-564-505-11	PLUG, CONNECTOR 2P			
A10	*1-564-511-11	PLUG, CONNECTOR 8P			
A11	*1-564-511-11	PLUG, CONNECTOR 8P			
A12	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
A13	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
A14	*1-564-513-11	PLUG, CONNECTOR 10P			
A15	*1-564-508-11	PLUG, CONNECTOR 5P			
A16	*1-564-508-11	PLUG, CONNECTOR 5P			
A17	*1-564-508-11	PLUG, CONNECTOR 5P			
A18	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
A19	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
A20	*1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P			
A21	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
A22	1-573-297-21	CONNECTOR, BOARD TO BOARD 18P			
A27	1-573-979-21	CONNECTOR, BOARD TO BOARD 11P			
A38	1-564-505-11	PLUG, CONNECTOR 2P			
A56	*1-564-508-11	PLUG, CONNECTOR 5P			

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<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D203	8-719-911-19	DIODE 1SS119	
D204	8-719-911-19	DIODE 1SS119	
D205	8-719-110-36	DIODE RD13ESB2	
D206	8-719-911-19	DIODE 1SS119	
D207	8-719-911-19	DIODE 1SS119	
D208	8-719-911-19	DIODE 1SS119	
D209	8-719-911-19	DIODE 1SS119	
D211	8-719-110-36	DIODE RD13ESB2	
D213	8-719-110-78	DIODE RD33ESB2	
D214	8-719-911-19	DIODE 1SS119	
D216	8-719-911-19	DIODE 1SS119	
D217	8-719-911-19	DIODE 1SS119	
D219	8-719-911-19	DIODE 1SS119	
D220	8-719-510-48	DIODE D1N20R	
D221	8-719-911-19	DIODE 1SS119	
D222	8-719-911-19	DIODE 1SS119	
D223	8-719-911-19	DIODE 1SS119	
D501	8-719-971-20	DIODE ERC38-06	
D502	8-719-971-20	DIODE ERC38-06	
D503	8-719-300-80	DIODE RU-1C	
D504	8-719-109-88	DIODE RD5.6ESB1	
D505	8-719-900-63	DIODE V06C (KP-46S55)	
D506	8-719-900-63	DIODE V06C (KP-46S55)	
D507	8-719-970-89	DIODE DD50R	
D509	8-719-911-19	DIODE 1SS119	
D510	8-719-109-71	DIODE RD3.9ESB1	
D511	8-719-911-19	DIODE 1SS119	
D512	8-719-911-19	DIODE 1SS119	
D513	8-719-911-19	DIODE 1SS119	
D514	8-719-911-19	DIODE 1SS119	
D515	8-719-911-19	DIODE 1SS119	
D1401	8-719-911-19	DIODE 1SS119	
D1402	8-719-911-19	DIODE 1SS119	
D1403	8-719-911-19	DIODE 1SS119	
D1406	8-719-911-19	DIODE 1SS119	
D1408	8-719-911-19	DIODE 1SS119	
D1410	8-719-911-19	DIODE 1SS119	
D1607	8-719-911-19	DIODE 1SS119	
D1608	8-719-911-19	DIODE 1SS119	
JW266	8-719-911-19	DIODE 1SS119	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC201	8-749-920-58	IC SI-3090CA	
IC204	8-759-231-53	IC TA7805S	
IC205	8-759-144-82	IC UPC2405HF	
IC206	8-759-231-58	IC TA7812S	
IC207	8-749-920-58	IC SI-3090CA	
IC506	8-752-057-18	IC CXA1315P	
IC1401	8-759-168-24	IC TA8200AH	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L201	1-408-429-00	INDUCTOR 470UH	
L201	1-408-429-00	INDUCTOR 470UH	
L205	1-410-645-31	INDUCTOR 100UH	
L206	1-408-416-00	INDUCTOR 39UH	
L206	1-408-416-00	INDUCTOR 39UH	
L212	1-410-312-11	INDUCTOR 0.22UH	
L501	⚠1-460-196-11	COIL, HORIZONTAL LINEARITY	
L502	1-459-313-00	COIL WITH CORE (HWC)	
L502	1-459-313-00	COIL WITH CORE (HWC)	
L515	1-410-645-31	INDUCTOR 100UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q203	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q501	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q502	8-729-014-88	TRANSISTOR 2SC4891-CA	
Q504	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q505	8-729-201-32	TRANSISTOR 2SA1013-O	
Q506	8-729-201-32	TRANSISTOR 2SA1013-O	
Q507	8-729-304-92	TRANSISTOR 2SB649A-C	
Q508	8-729-204-16	TRANSISTOR 2SA1301-O	
Q509	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q510	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q511	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q512	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1401	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1402	8-729-900-63	TRANSISTOR DTA124ES	
Q1407	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1408	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1620	8-729-119-76	TRANSISTOR 2SA1175-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R203	1-249-425-11	CARBON	4.7K	5%	1/4W	
R204	1-249-441-11	CARBON	100K	5%	1/4W	
R214	1-249-429-11	CARBON	10K	5%	1/4W	
R215	1-249-437-11	CARBON	47K	5%	1/4W	
R216	1-249-377-11	CARBON	0.47	5%	1/4W	F
R219	1-249-426-11	CARBON	5.6K	5%	1/4W	
R221	1-249-409-11	CARBON	220	5%	1/4W	
R222	1-249-436-11	CARBON	39K	5%	1/4W	
R223	1-249-434-11	CARBON	27K	5%	1/4W	
R224	1-249-409-11	CARBON	220	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R229	⚠1-216-488-71	METAL OXIDE	18K	5%	3W	F
R231	1-249-409-11	CARBON	220	5%	1/4W	F
R232	⚠1-215-906-71	METAL OXIDE	15	5%	3W	F
R233	1-249-409-11	CARBON	220	5%	1/4W	
R234	1-249-409-11	CARBON	220	5%	1/4W	
R235	1-249-409-11	CARBON	220	5%	1/4W	
R236	1-249-409-11	CARBON	220	5%	1/4W	
R237	1-249-409-11	CARBON	220	5%	1/4W	
R238	1-249-409-11	CARBON	220	5%	1/4W	
R239	1-249-409-11	CARBON	220	5%	1/4W	
R240	⚠1-215-906-71	METAL OXIDE	15	5%	3W	F
R242	⚠1-215-906-71	METAL OXIDE	15	5%	3W	F
R243	⚠1-217-294-11	WIREWOUND	4.7	10%	5W	F
R244	⚠1-217-296-11	WIREWOUND	6.8	10%	5W	F
R296	1-249-417-11	CARBON	1K	5%	1/4W	
R501	1-247-895-00	CARBON	470K	5%	1/4W	
R502	1-249-377-11	CARBON	0.47	5%	1/4W	F
R503	1-249-377-11	CARBON	0.47	5%	1/4W	F
R504	1-249-417-11	CARBON	1K	5%	1/4W	

A P1

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Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R505	1-249-423-11	CARBON	3.3K	5%	1/4W	
R506	⚠1-215-922-91	METAL OXIDE	6.8K	5%	3W	F
R507	1-249-429-11	CARBON	10K	5%	1/4W	F
R508	⚠1-216-373-91	METAL OXIDE	2.2	5%	2W	F
R509	⚠1-216-478-91	METAL OXIDE	390	5%	3W	F
R511	1-247-811-31	CARBON	150	5%	1/4W	
R512	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R513	1-249-417-11	CARBON	1K	5%	1/4W	
R514	⚠1-215-877-91	METAL OXIDE	22K	5%	1W	F
R515	1-249-430-11	CARBON	12K	5%	1/4W	F
R516	1-249-417-11	CARBON	1K	5%	1/4W	
R517	1-249-426-11	CARBON	5.6K	5%	1/4W	F
R518	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R519	1-249-417-11	CARBON	1K	5%	1/4W	F
R520	⚠1-215-925-91	METAL OXIDE	22K	5%	3W	F
R521	⚠1-215-925-91	METAL OXIDE	22K	5%	3W	F
R522	1-249-421-11	CARBON	2.2K	5%	1/4W	
R523	1-249-434-11	CARBON	27K	5%	1/4W	
R524	1-249-434-11	CARBON	27K	5%	1/4W	
R525	⚠1-215-922-91	METAL OXIDE	6.8K	5%	3W	F
R526	1-249-417-11	CARBON	1K	5%	1/4W	
R528	⚠1-216-447-91	METAL OXIDE	27	5%	2W	F
R529	⚠1-216-447-91	METAL OXIDE	27	5%	2W	F
R530	1-249-431-11	CARBON	15K	5%	1/4W	
R531	1-249-431-11	CARBON	15K	5%	1/4W	
R532	1-249-385-11	CARBON	2.2	5%	1/4W	F
R533	1-249-429-11	CARBON	10K	5%	1/4W	
R534	1-249-429-11	CARBON	10K	5%	1/4W	
R536	⚠1-217-315-11	WIREWOUND	270	10%	5W	F (KP-46S55)
R537	⚠1-217-315-11	WIREWOUND	270	10%	5W	F (KP-46S55)
R550	1-249-385-11	CARBON	2.2	5%	1/4W	F
R558	1-249-385-11	CARBON	2.2	5%	1/4W	F
R559	1-249-409-11	CARBON	220	5%	1/4W	
R560	1-249-409-11	CARBON	220	5%	1/4W	
R565	1-249-427-11	CARBON	6.8K	5%	1/4W	
R566	1-249-427-11	CARBON	6.8K	5%	1/4W	
R567	1-249-427-11	CARBON	6.8K	5%	1/4W	
R568	1-249-427-11	CARBON	6.8K	5%	1/4W	
R569	1-249-426-11	CARBON	5.6K	5%	1/4W	
R570	1-249-441-11	CARBON	100K	5%	1/4W	
R571	1-249-429-11	CARBON	10K	5%	1/4W	
R572	1-249-429-11	CARBON	10K	5%	1/4W	
R579	1-249-417-11	CARBON	1K	5%	1/4W	
R1401	1-215-445-00	METAL	10K	1%	1/4W	
R1402	1-215-445-00	METAL	10K	1%	1/4W	
R1403	1-215-445-00	METAL	10K	1%	1/4W	
R1404	1-215-445-00	METAL	10K	1%	1/4W	
R1405	1-249-385-11	CARBON	2.2	5%	1/4W	
R1406	1-249-385-11	CARBON	2.2	5%	1/4W	
R1409	1-249-433-11	CARBON	22K	5%	1/4W	
R1410	1-249-433-11	CARBON	22K	5%	1/4W	
R1411	1-249-437-11	CARBON	47K	5%	1/4W	
R1427	⚠1-215-865-91	METAL OXIDE	220	5%	1W	F
R1428	⚠1-215-865-91	METAL OXIDE	220	5%	1W	F
R1431	1-247-807-31	CARBON	100	5%	1/4W	
R1433	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1434	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1439	1-247-883-00	CARBON	150K	5%	1/4W	
R1440	1-249-417-11	CARBON	1K	5%	1/4W	
R1442	1-215-410-00	METAL	360	1%	1/4W	
R1443	1-215-410-00	METAL	360	1%	1/4W	
R1520	1-249-429-11	CARBON	10K	5%	1/4W	
R1602	1-249-417-11	CARBON	1K	5%	1/4W	
R1605	1-247-807-31	CARBON	100	5%	1/4W	
R1606	1-247-807-31	CARBON	100	5%	1/4W	
R1610	1-247-807-31	CARBON	100	5%	1/4W	
R1611	1-247-807-31	CARBON	100	5%	1/4W	
R1612	1-247-807-31	CARBON	100	5%	1/4W	
R1614	1-249-411-11	CARBON	330	5%	1/4W	
R1630	1-249-434-11	CARBON	27K	5%	1/4W	
R1631	1-249-433-11	CARBON	22K	5%	1/4W	

<TRANSFORMER>

T501	⚠1-439-545-11	TRANSFORMER, FERRITE	
T502	⚠1-437-078-11	TRANSFORMER, HORIZONTAL DRIVE	

<TUNER>

TU101	⚠1-693-102-22	TUNER (BTF-XA401)	

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*A-1195-084-A P1 BOARD, COMPLETE
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<CAPACITOR>

C3001	1-124-589-11	ELECT	47MF	20%	16V
C3002	1-164-346-11	CERAMIC CHIP	1MF		16V
C3003	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3004	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C3005	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C3006	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3007	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3008	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3009	1-124-925-11	ELECT	2.2MF	20%	50V
C3010	1-163-145-00	CERAMIC CHIP	0.0015MF	5%	50V
C3011	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V
C3012	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C3013	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C3014	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3015	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3016	1-163-107-00	CERAMIC CHIP	39PF	5%	50V
C3017	1-130-495-00	MYLAR	0.1MF	5%	50V
C3018	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C3019	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3020	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C3021	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C3022	1-126-301-11	ELECT	1MF	20%	50V
C3023	1-124-589-11	ELECT	47MF	20%	16V
C3024	1-163-018-00	CERAMIC CHIP	0.0056MF	10%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C3025	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V
C3026	1-126-163-11	ELECT	4.7MF	20%	50V
C3027	1-163-275-11	CERAMIC CHIP	0.001MF	5%	50V
C3028	1-124-589-11	ELECT	47MF	20%	16V
C3029	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3030	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C3031	1-126-177-11	ELECT	100MF	20%	6.3V
C3032	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3033	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3034	1-164-336-11	CERAMIC CHIP	0.33MF		25V
C3035	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C3036	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3037	1-124-589-11	ELECT	47MF	20%	16V
C3038	1-136-287-11	FILM	0.0047MF	5%	50V
C3039	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3040	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3041	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C3042	1-164-346-11	CERAMIC CHIP	1MF		16V
C3043	1-124-465-00	ELECT	0.47MF	20%	50V
C3044	1-126-301-11	ELECT	1MF	20%	50V
C3045	1-124-589-11	ELECT	47MF	20%	16V
C3046	1-126-301-11	ELECT	1MF	20%	50V
C3047	1-126-301-11	ELECT	1MF	20%	50V
C3048	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C3051	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V
C3052	1-126-177-11	ELECT	100MF	20%	6.3V
C3053	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3054	1-126-177-11	ELECT	100MF	20%	6.3V
C3055	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C3057	1-124-589-11	ELECT	47MF	20%	16V
C3058	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C3059	1-164-222-11	CERAMIC CHIP	0.22MF		25V
C3060	1-124-589-11	ELECT	47MF	20%	16V
C3064	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C3065	1-124-589-11	ELECT	47MF	20%	16V
C3066	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3067	1-124-589-11	ELECT	47MF	20%	16V
C3069	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C3070	1-126-177-11	ELECT	100MF	20%	6.3V
C3071	1-124-589-11	ELECT	47MF	20%	16V
C3072	1-124-589-11	ELECT	47MF	20%	16V
C3073	1-124-589-11	ELECT	47MF	20%	16V
C3074	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C3076	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3077	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C3081	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C3100	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C3101	1-163-249-11	CERAMIC CHIP	82PF	5%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CN151	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D3003	8-719-158-15	DIODE RD5.6SB
D3004	8-719-404-46	DIODE MA110
D3009	8-719-404-46	DIODE MA110

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC3001	8-759-046 25	IC TDA3769
IC3002	8-759-009-46	IC MC14528BF
IC3003	8 759-513-48	IC TDA2595/V9
IC3004	8-759-248-15	IC SDA9187-2XGEG
IC3005	8-759-192-90	IC SDA9188-3XGEG
IC3006	8-759-112-06	IC UPC78N05H
IC3007	8-759-248-91	IC SDA9086-5
IC3008	8-759-112-06	IC UPC78N05H

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L3001	1-410-476-11	INDUCTOR	33UH
L3002	1-408-424-00	INDUCTOR	180UH
L3003	1-408-424-00	INDUCTOR	180UH
L3004	1-410-470-11	INDUCTOR	10UH
L3005	1-410-472-41	INDUCTOR	15UH
L3006	1-412-788-41	INDUCTOR	10UH
L3007	1-410-472-41	INDUCTOR	15UH
L3008	1-410-472-41	INDUCTOR	15UH
L3009	1-410-472-41	INDUCTOR	15UH
L3010	1-410-466-41	INDUCTOR	4.7UH
L3011	1-410-470-11	INDUCTOR	10UH
L3012	1-410-676-31	INDUCTOR	150UH
L3013	1-412-911-11	INDUCTOR, FERRITE BEAD	
L3014	1-412-911-11	INDUCTOR, FERRITE BEAD	
L3015	1-412-911-11	INDUCTOR, FERRITE BEAD	
L3100	1-410-392-11	INDUCTOR	82UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q3003	8-729-216-22	TRANSISTOR 2SA1162-G
Q3004	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3006	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3007	8-729-216-22	TRANSISTOR 2SA1162-G
Q3008	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3009	8-729-216-22	TRANSISTOR 2SA1162-G
Q3010	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3011	8-729-216-22	TRANSISTOR 2SA1162-G
Q3012	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3013	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3014	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q3100	8-729-216-22	TRANSISTOR 2SA1162-G

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
JR1	1-216-295-00	METAL GLAZE	0	5%	1/10W
JW2	1-216-295-00	METAL GLAZE	0	5%	1/10W
R3001	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R3002	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R3003	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R3004	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R3005	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R3006	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R3007	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R3008	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3009	1-216-041-00	METAL GLAZE	470	5%	1/10W
R3010	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3011	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R3012	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R3013	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3014	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R3015	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R3017	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R3018	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R3019	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R3020	1-216-099-00	METAL GLAZE	120K	5%	1/10W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R3021	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R3023	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3024	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R3025	1-216-015-00	METAL GLAZE	39	5%	1/10W	
R3026	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3027	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R3028	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R3030	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3031	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R3032	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3033	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3034	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3035	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R3036	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R3037	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R3038	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3039	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3040	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3041	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3042	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R3043	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R3044	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3045	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3050	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3052	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3053	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R3055	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3056	1-216 059-00	METAL GLAZE	2.7K	5%	1/10W	
R3057	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3058	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3059	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R3060	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3061	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3062	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3063	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3064	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3065	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3066	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3067	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3069	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R3071	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3073	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3074	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3075	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3076	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R3077	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3078	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R3079	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R3082	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R3084	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3085	1-216-119-00	METAL GLAZE	820K	5%	1/10W	
R3086	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3087	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3088	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3089	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3090	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3091	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3092	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R3098	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R3099	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R3100	1-216-296-91	METAL GLAZE	0	5%	1/8W	
R3101	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R3102	1-216-047-00	METAL GLAZE	820	5%	1/10W	
R3103	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R3104	1-216-049-00	METAL GLAZE	1K	5%	1/10W	

<VARIABLE RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
RV3001	1-241-630-11	RES, ADJ, CARBON 10K	
RV3002	1-238-019-11	RES, ADJ, CARBON 47K	
RV3003	1-241-630-11	RES, ADJ, CARBON 10K	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X3001	1-567-505-11	OSCILLATOR, CRYSTAL	

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*A-1306-457-A M BOARD, COMPLETE
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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C001	1-124-261-00	ELECT	10MF	20%	50V	
C002	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C003	1-136-161-00	FILM	0.047MF	5%	50V	
C004	1-126-301-11	ELECT	1MF	20%	50V	
C005	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C014	1-124-910-11	ELECT	47MF	20%	50V	
C017	1-124-589-11	ELECT	47MF	20%	16V	
C018	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	
C019	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V	
C020	1-163-241-11	CERAMIC CHIP	39PF	5%	50V	
C021	1-163-239-11	CERAMIC CHIP	33PF	5%	50V	
C029	1-163-249-11	CERAMIC CHIP	82PF	5%	50V	
C030	1-163-249-11	CERAMIC CHIP	82PF	5%	50V	
C034	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C035	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C036	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C041	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C042	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C045	1-163-125-00	CERAMIC CHIP	220PF	5%	50V	
C047	1-124-261-00	ELECT	10MF	20%	50V	
C048	1-124-261-00	ELECT	10MF	20%	50V	
C049	1-124-261-00	ELECT	10MF	20%	50V	
C055	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V	
C064	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C065	1-124-257-00	ELECT	2.2MF	20%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
M45	*1-564-523-11	PLUG, CONNECTOR 8P	
M001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D001	8-719-404-46	DIODE MA110	
D002	8-719-404-46	DIODE MA110	
D009	8-719-404-46	DIODE MA110	
D010	8-713-300-57	DIODE 1T33	
D011	8-719-404-46	DIODE MA110	
D012	8-719-404-46	DIODE MA110	
D014	8-719-404-46	DIODE MA110	
D015	8-719-404-46	DIODE MA110	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC001	8-759-254-34	IC TMC73C247-51	
IC002	8-759-403-44	IC MN1280-S	

M **E2**

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L001	1-408-409-00	INDUCTOR	10UH	
L002	1-410-476-11	INDUCTOR	33UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q001	8-729-216-22	TRANSISTOR 2SA1162-G	
Q009	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q010	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q011	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q012	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q013	8-729-216-22	TRANSISTOR 2SA1162-G	
Q014	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R001	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R002	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R003	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R004	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R005	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R006	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R007	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R008	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R009	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R011	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R012	1-216 033-00	METAL GLAZE	220	5%	1/10W	
R013	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R014	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R015	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R016	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R017	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R018	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R019	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R033	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R034	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R035	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R036	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R037	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R038	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R039	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R040	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R041	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R042	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R043	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R044	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R045	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R046	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R047	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R048	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R049	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R050	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R051	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R052	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R053	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R054	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R055	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R056	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R057	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R058	1-216 065-00	METAL GLAZE	4.7K	5%	1/10W	
R059	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R060	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R063	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R064	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R065	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R066	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R067	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R068	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R069	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R070	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R072	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R073	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R074	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R075	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R076	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R077	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R078	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R079	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R080	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R081	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R082	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R083	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R084	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R085	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R086	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R087	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R088	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R089	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R090	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R091	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R092	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R093	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R094	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R095	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R096	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R097	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R098	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R100	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R101	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R102	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R103	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R104	1-216-033-00	METAL GLAZE	220	5%	1/10W	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X001	1-579-743-11	VIBRATOR, CRYSTAL	

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*A-1346-137-A E2 BOARD, COMPLETE
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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C2302	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C2303	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C2310	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	
C2314	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C2315	1-126-157-11	ELECT	10MF	20%	16V	
C2316	1-126-157-11	ELECT	10MF	20%	16V	
C2317	1-126-157-11	ELECT	10MF	20%	16V	
C2318	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C2320	1-124-589-11	ELECT	47MF	20%	16V	
C2321	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C2322	1-124-234-00	ELECT	22MF	20%	16V	

E2

REF.NO.	PART NO.	DESCRIPTION	REMARK
C2323	1-124-234-00	ELECT 22MF 20%	16V
C2324	1-124-234-00	ELECT 22MF 20%	16V
C2325	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2326	1-124-589-11	ELECT 47MF 20%	16V
C2327	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C2328	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2329	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2331	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2332	1-124-234-00	ELECT 22MF 20%	16V
C2333	1-124-234-00	ELECT 22MF 20%	16V
C2334	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2335	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2336	1-126-163-11	ELECT 4.7MF 20%	16V
C2337	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2338	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C2340	1-163-133-00	CERAMIC CHIP 470PF 5%	50V
C2341	1-135-217-21	TANTAL. CHIP 15MF 20%	6.3V
C2345	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C2346	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2347	1-163-367-11	CERAMIC CHIP 39PF 5%	50V
C2349	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C2350	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2351	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C2352	1-164-505-11	CERAMIC CHIP 2.2MF	16V
C2353	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2354	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V
C2357	1-126-301-11	ELECT 1MF 20%	50V
C2360	1-163-109-00	CERAMIC CHIP 47PF 5%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
E2-25	*1-564-521-11	PLUG, CONNECTOR 6P	
E2-26	*1-564-522-11	PLUG, CONNECTOR 7P	
E2-46	*1-564-518-11	PLUG, CONNECTOR 3P	
E2-002	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D2306	8-719-404-46	DIODE MA110	
D2307	8-719-948-98	DIODE FMN1	
D2308	8-719-948-98	DIODE FMN1	
D2309	8-719-404-46	DIODE MA110	
D2312	8-719-404-46	DIODE MA110	
D2313	8-719-404-46	DIODE MA110	
D2314	8-713-300-57	DIODE 1T33	
D2317	8-719-404-46	DIODE MA110	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC2301	8-759-066-52	IC PCA8510T/012-T	
IC2303	8-759-925-75	IC SN74HC05ANS	
IC2304	8-752-037-15	IC CXA1387S	
IC2306	8-759-011-65	IC MC74HC4053F	
IC2307	8-752-058-68	IC CXA1315M	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L2304	1-408-414-00	INDUCTOR 27UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q2301	8-729-903-10	TRANSISTOR FMW1	
Q2303	8-729-403-27	TRANSISTOR XN4401	
Q2304	8-729-925-79	TRANSISTOR IMX3	
Q2305	8-729-903-10	TRANSISTOR FMW1	
Q2306	8-729-403-27	TRANSISTOR XN4401	
Q2307	8-729-403-27	TRANSISTOR XN4401	
Q2308	8-729-403-27	TRANSISTOR XN4401	
Q2309	8-729-903-10	TRANSISTOR FMW1	
Q2310	8-729-403-27	TRANSISTOR XN4401	
Q2311	8-729-903-10	TRANSISTOR FMW1	
Q2312	8-729-403-27	TRANSISTOR XN4401	
Q2313	8-729-903-10	TRANSISTOR FMW1	
Q2314	8-729-403-27	TRANSISTOR XN4401	
Q2315	8-729-903-10	TRANSISTOR FMW1	
Q2317	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2318	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2319	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2320	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2321	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2322	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2324	8-729-216-22	TRANSISTOR 2SA1162-G	
Q2326	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2327	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2328	8-729-925-79	TRANSISTOR IMX3	
Q2329	8-729-925-79	TRANSISTOR IMX3	
Q2330	8-729-903-10	TRANSISTOR FMW1	
Q2336	8-729-925-79	TRANSISTOR IMX3	
Q2337	8-729-925-79	TRANSISTOR IMX3	
Q2339	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2340	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2341	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R2302	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2303	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2304	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2305	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R2306	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2307	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2308	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R2309	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2310	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2311	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2312	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R2313	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2314	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2315	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R2317	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R2318	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R2319	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R2320	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2321	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2322	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2323	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R2324	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2325	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R2326	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2327	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2328	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2329	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2330	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R2331	1-216-063-00	METAL GLAZE 3.9K 5% 1/10W	
R2332	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R2333	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R2334	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R2335	1-216-295-00	METAL GLAZE 0 5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R2336	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R2337	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2338	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2340	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2341	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2342	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2343	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2344	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2345	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R2346	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2347	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R2348	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R2349	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2350	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2351	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2352	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2353	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R2354	1-216-210-00	METAL GLAZE	3.3K	5%	1/8W	
R2355	1-216-178-00	METAL GLAZE	150	5%	1/8W	
R2356	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R2357	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W	
R2359	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2360	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2361	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2362	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2363	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R2364	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2365	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R2366	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2367	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2368	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2371	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R2374	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R2375	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2376	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2377	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2378	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2379	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2380	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2381	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2382	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R2384	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R2385	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R2386	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2387	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R2388	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2389	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R2390	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2392	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R2393	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R2394	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R2395	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R2396	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R2397	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R2399	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3301	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3302	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3303	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3304	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R3306	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3307	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R3308	1-216-043-00	METAL GLAZE	560	5%	1/10W	
R3309	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3310	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3311	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3312	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3313	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R3314	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R3315	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3316	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R3318	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R3319	1-216-095-00	METAL GLAZE	82K	5%	1/10W	
R3320	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R3321	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3323	1-216-101-00	METAL GLAZE	150K	5%	1/10W	
R3324	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3325	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3328	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3330	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3331	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3332	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3333	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W	
R3334	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	
R3335	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3336	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	
R3337	1-216-685-11	METAL CHIP	27K	0.50%	1/10W	
R3339	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R3340	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3341	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	
R3342	1-216-670-11	METAL CHIP	6.2K	0.50%	1/10W	
R3343	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R3344	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R3347	1-216-687-11	METAL CHIP	33K	0.50%	1/10W	
R3348	1-208-812-11	METAL CHIP	18K	0.50%	1/10W	
R3349	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3350	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3351	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3352	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3353	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3354	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3356	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R3357	1-216-654-11	METAL CHIP	1.3K	0.50%	1/10W	
R3358	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R3359	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W	
R3360	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3361	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3362	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R3364	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3365	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R3367	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R3368	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R3369	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3370	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3371	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R3373	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	
R3374	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R3375	1-216-056-00	METAL GLAZE	2K	5%	1/10W	
R3375	1-216-658-11	METAL CHIP	2K	0.50%	1/10W	
R3376	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R3377	1-216-647-11	METAL CHIP	680	0.50%	1/10W	
R3378	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	
R3379	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W	
R3380	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W	
R3381	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3382	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3392	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R3401	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

E2 **E1**

REF.NO.	PART NO.	DESCRIPTION			REMARK
R7312	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R7313	1-216-047-00	METAL GLAZE	820	5%	1/10W
R7314	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W

<CRYSTAL>

X2301	1-577-071-11	VIBRATOR, CERAMIC

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*A-1346-138-A E1 BOARD, COMPLETE
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<CAPACITOR>

C301	1-163-010-11	CERAMIC CHIP	0.0012MF	10%	50V
C303	1-126-157-11	ELECT	10MF	20%	16V
C304	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C305	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C306	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C309	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C310	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C314	1-124-667-11	ELECT	10MF	20%	16V
C315	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C319	1-126-157-11	ELECT	10MF	20%	16V
C320	1-124-465-00	ELECT	0.47MF	20%	50V
C321	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C322	1-163-003-11	CERAMIC CHIP	330PF	10%	50V
C323	1-163-099-00	CERAMIC CHIP	18PF	5%	50V
C324	1-124-234-00	ELECT	22MF	20%	16V
C325	1-104-563-11	FILM CHIP	0.1MF	5%	16V
C326	1-104-563-11	FILM CHIP	0.1MF	5%	16V
C327	1-104-563-11	FILM CHIP	0.1MF	5%	16V
C328	1-126-157-11	ELECT	10MF	20%	16V
C329	1-126-157-11	ELECT	10MF	20%	16V
C330	1-126-157-11	ELECT	10MF	20%	16V
C331	1-126-301-11	ELECT	1MF	20%	50V
C332	1-124-584-00	ELECT	100MF	20%	10V
C333	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V
C334	1-137-491-11	FILM CHIP	0.1MF	5%	25V
C335	1-136-169-00	FILM	0.22MF	5%	50V
C336	1-126-301-11	ELECT	1MF	20%	50V
C337	1-126-301-11	ELECT	1MF	20%	50V
C338	1-124-584-00	ELECT	100MF	20%	10V
C339	1-126-801-11	ELECT	1MF	20%	50V
C340	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C341	1-126-157-11	ELECT	10MF	20%	16V
C342	1-124-465-00	ELECT	0.47MF	20%	50V
C343	1-124-589-11	ELECT	47MF	20%	16V
C344	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C346	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C348	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C350	1-126-301-11	ELECT	1MF	20%	50V
C351	1-163-002-11	CERAMIC CHIP	270PF	10%	50V
C352	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V
C353	1-126-163-11	ELECT	4.7MF	20%	50V
C355	1-124-465-00	ELECT	0.47MF	20%	50V
C356	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C357	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C360	1-137-491-11	FILM CHIP	0.1MF	5%	25V
C361	1-126-301-11	ELECT	1MF	20%	50V
C362	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C363	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C364	1-126-301-11	ELECT	1MF	20%	50V
C365	1-164-343-11	CERAMIC CHIP	0.056MF	10%	25V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C366	1-124-257-00	ELECT	2.2MF	20%	50V
C367	1-126-157-11	ELECT	10MF	20%	16V
C368	1-124-234-00	ELECT	22MF	20%	16V
C369	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C370	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C371	1-126-803-11	ELECT	47MF	20%	16V
C372	1-124-589-11	ELECT	47MF	20%	16V
C373	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C378	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C379	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C380	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C381	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C382	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C383	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C384	1-163-095-00	CERAMIC CHIP	12PF	5%	50V

<CONNECTOR>

E1-24	1-564-523-11	PLUG, CONNECTOR 8P
E1-25	*1-564-521-11	PLUG, CONNECTOR 6P
E1-26	*1-564-522-11	PLUG, CONNECTOR 7P
E1-001	1-573-965-21	PIN, CONNECTOR (PC BOARD) 50P

<DIODE>

D301	8-719-404-46	DIODE MA110
D302	8-719-404-46	DIODE MA110
D303	8-719-404-46	DIODE MA110
D304	8-719-404-46	DIODE MA110
D305	8-719-404-46	DIODE MA110
D306	8-719-158-15	DIODE RD5.6SB
D307	8-719-404-46	DIODE MA110
D310	8-719-158-15	DIODE RD5.6SB
D312	8-719-404-46	DIODE MA110
D313	8-719-404-46	DIODE MA110
D314	8-719-404-46	DIODE MA110
D315	8-719-404-46	DIODE MA110
D316	8-719-404-46	DIODE MA110
D317	8-719-404-46	DIODE MA110
D318	8-719-404-46	DIODE MA110
D319	8-719-404-46	DIODE MA110
D320	8-719-404-46	DIODE MA110
D321	8-719-400-94	DIODE MA3130

<DELAY LINE>

DL302	1-415-817-11	DELAY LINE

<IC>

IC301	8-752-058-68	IC CXA1315M
IC302	8-752-057-68	IC CXA1464AS

<COIL>

L301	1-410-064-11	INDUCTOR	2.7MMH
L307	1-410-944-31	INDUCTOR CHIP	15UH
L308	1-410-946-31	INDUCTOR CHIP	22UH

<TRANSISTOR>

Q301	8-729-925-79	TRANSISTOR IMX3
Q302	8-729-925-79	TRANSISTOR IMX3
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q304	8-729-907-46	TRANSISTOR IMZ1	
Q305	8-729-925-79	TRANSISTOR IMX3	
Q306	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q307	8-729-903-10	TRANSISTOR FMW1	
Q309	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q310	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q311	8-729-403-27	TRANSISTOR XN4401	
Q312	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q314	8-729-403-27	TRANSISTOR XN4401	
Q315	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q316	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q317	8-729-216-22	TRANSISTOR 2SA1162-G	
Q321	8-729-925-79	TRANSISTOR IMX3	
Q322	8-729-216-22	TRANSISTOR 2SA1162-G	
Q323	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q324	8-729-216-22	TRANSISTOR 2SA1162-G	
Q325	8-729-216-22	TRANSISTOR 2SA1162-G	
Q326	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q327	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q328	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q333	8-729-925-79	TRANSISTOR IMX3	
Q334	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q335	8-729-907-46	TRANSISTOR IMZ1	
Q340	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q342	8-729-925-79	TRANSISTOR IMX3	
Q344	8-729-216-22	TRANSISTOR 2SA1162-G	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R301	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R302	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R303	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R305	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R306	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R307	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R308	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R309	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R310	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R312	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R313	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R314	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R316	1-216-035-00	METAL GLAZE 270 5% 1/10W	
R317	1-216-121-00	METAL GLAZE 1M 5% 1/10W	
R320	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R325	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R326	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R331	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R332	1-216-657-11	METAL CHIP 1.8K 0.50% 1/10W	
R333	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R336	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R338	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R339	1-216-047-00	METAL GLAZE 820 5% 1/10W	
R340	1-216-651-11	METAL CHIP 1K 0.50% 1/10W	
R341	1-216-043-00	METAL GLAZE 560 5% 1/10W	
R343	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R344	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R345	1-216-292-11	METAL GLAZE 8.2M 5% 1/8W	
R346	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R347	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R348	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R349	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R350	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
R351	1-216-674-11	METAL CHIP 9.1K 0.50% 1/10W	
R352	1-216-011-00	METAL GLAZE 27 5% 1/10W	
R353	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R354	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R355	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R356	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R357	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R358	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R359	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R360	1-216-119-00	METAL GLAZE 820K 5% 1/10W	
R361	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R362	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
R363	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R364	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R365	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R366	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R367	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R368	1-216-001-00	METAL GLAZE 10 5% 1/10W	
R369	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R370	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R371	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R372	1-216-031-00	METAL GLAZE 180 5% 1/10W	
R373	1-216-671-11	METAL CHIP 6.8K 0.50% 1/10W	
R374	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R375	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R376	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R377	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R378	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R379	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R380	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R381	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R382	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R383	1-216-653-11	METAL CHIP 1.2K 0.50% 1/10W	
R384	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R385	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R386	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R387	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R388	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R389	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R390	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R391	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R393	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W	
R394	1-216-109-00	METAL GLAZE 330K 5% 1/10W	
R395	1-216-071-00	METAL GLAZE 8.2K 5% 1/10W	
R397	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R398	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R399	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
R1301	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1302	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R1303	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R1304	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1305	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1306	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R1307	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1308	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1309	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R1310	1-216-045-00	METAL GLAZE 680 5% 1/10W	
R1311	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1312	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R1313	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1314	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R1315	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R1316	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
R1317	1-216-073-00	METAL GLAZE 10K 5% 1/10W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1318	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1319	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1320	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R1321	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1322	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R1323	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1324	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1325	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1326	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1327	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1328	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1329	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1330	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1331	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1333	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W	
R1342	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1346	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1347	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1348	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1349	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1350	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R1352	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R1353	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1354	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1355	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R1356	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1357	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1358	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R1362	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R1363	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1364	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R1373	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1374	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1379	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1380	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R1381	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1382	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R1383	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R1384	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1385	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1386	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1387	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R1388	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R1389	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1390	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1391	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R1392	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1394	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1395	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R1396	1-216-125-00	METAL GLAZE	1.5M	5%	1/10W	
R1399	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R5301	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R5302	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5303	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R5304	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R5305	1-216-085-00	METAL GLAZE	33K	5%	1/10W	

<CRYSTAL>

X301	1-567-505-11	OSCILLATOR, CRYSTAL	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
	*A-1394-532-A	Y2 BOARD, COMPLETE				

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<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C401	1-124-234-00	ELECT	22MF	20%	16V	
C424	1-126-301-11	ELECT	1MF	20%	50V	
C425	1-126-301-11	ELECT	1MF	20%	50V	
C426	1-126-301-11	ELECT	1MF	20%	50V	
C427	1-124-465-00	ELECT	0.47MF	20%	50V	
C428	1-126-163-11	ELECT	4.7MF	20%	50V	
C429	1-124-478-11	ELECT	100MF	20%	25V	
C430	1-124-261-00	ELECT	10MF	20%	50V	
C431	1-126-301-11	ELECT	1MF	20%	50V	
C432	1-126-301-11	ELECT	1MF	20%	50V	
C433	1-131-347-00	TANTALUM	1MF	20%	16V	
C434	1-126-301-11	ELECT	1MF	20%	50V	
C435	1-130-994-11	FILM	0.033MF	5%	50V	
C436	1-126-301-11	ELECT	1MF	20%	50V	
C437	1-137-372-11	FILM	0.022MF	5%	50V	
C438	1-126-301-11	ELECT	1MF	20%	50V	
C439	1-104-792-51	ELECT	33MF	20%	16V	
C440	1-126-301-11	ELECT	1MF	20%	50V	
C441	1-126-301-11	ELECT	1MF	20%	50V	
C442	1-124-261-00	ELECT	10MF	20%	50V	
C443	1-124-589-11	ELECT	47MF	20%	16V	
C444	1-126-163-11	ELECT	4.7MF	20%	50V	
C445	1-126-163-11	ELECT	4.7MF	20%	50V	
C446	1-124-234-00	ELECT	22MF	20%	16V	
C447	1-126-301-11	ELECT	1MF	20%	50V	
C448	1-136-170-00	FILM	0.27MF	5%	50V	
C449	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C450	1-137-366-11	FILM	0.0022MF	5%	50V	
C451	1-124-261-00	ELECT	10MF	20%	50V	
C452	1-124-261-00	ELECT	10MF	20%	50V	
C453	1-137-366-11	FILM	0.0022MF	5%	50V	
C454	1-131-368-00	TANTALUM	3.3MF	10%	16V	
C455	1-131-347-00	TANTALUM	1MF	20%	16V	
C456	1-136-171-00	FILM	0.33MF	5%	50V	
C457	1-136-175-00	FILM	0.68MF	5%	50V	
C458	1-126-101-11	ELECT	100MF	20%	16V	
C459	1-126-101-11	ELECT	100MF	20%	16V	
C460	1-126-101-11	ELECT	100MF	20%	16V	
C461	1-124-499-11	ELECT	1MF	20%	50V	
C462	1-124-499-11	ELECT	1MF	20%	50V	
C465	1-130-485-00	MYLAR	0.015MF	5%	50V	
C466	1-130-485-00	MYLAR	0.015MF	5%	50V	
C467	1-136-169-00	FILM	0.22MF	5%	50V	
C468	1-136-169-00	FILM	0.22MF	5%	50V	
C469	1-126-157-11	ELECT	10MF	20%	16V	
C470	1-126-157-11	ELECT	10MF	20%	16V	
C471	1-124-589-11	ELECT	47MF	20%	16V	
C472	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C473	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C474	1-124-234-00	ELECT	22MF	20%	16V	
C475	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C476	1-124-234-00	ELECT	22MF	20%	16V	
C477	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C478	1-124-478-11	ELECT	100MF	20%	25V	
C479	1-126-163-11	ELECT	4.7MF	20%	50V	
C480	1-124-768-11	ELECT	4.7MF	20%	50V	
C481	1-124-768-11	ELECT	4.7MF	20%	50V	
C482	1-126-163-11	ELECT	4.7MF	20%	50V	
C483	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	

Y2 **G**

REF.NO.	PART NO.	DESCRIPTION				REMARK
C484	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C485	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C487	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C488	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
Y2-401	1-573-966-11	PIN, CONNECTOR (PC BOARD) 36P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D405	8-719-107-13	DIODE RD18M-B1
D406	8-719-107-13	DIODE RD18M-B1
D407	8-719-107-13	DIODE RD18M-B1
D408	8-719-105-83	DIODE RD5.1M-B3
D409	8-719-981-50	DIODE RB-100A
D410	8-719-981-50	DIODE RB-100A
D413	8-719-158-19	DIODE RD6.2SB
D414	8-719-158-55	DIODE RD15SB
D415	8-719-158-55	DIODE RD15SB

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC403	8-759-996-43	IC RC4558PS
IC404	8-759-067-24	IC 24C04AI/P
IC406	8-752-037-24	IC CXA1264AS
IC407	8-759-245-75	IC TA8184P
IC408	8-752-057-18	IC CXA1315P

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q404	8-729-216-22	TRANSISTOR 2SA1162-G
Q405	8-729-216-22	TRANSISTOR 2SA1162-G
Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6
Q410	8-729-120-28	TRANSISTOR 2SC1623-L5L6

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			
R447	1-216-033-00	METAL GLAZE	220	5%	1/10W
R453	1-216-033-00	METAL GLAZE	220	5%	1/10W
R464	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R465	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R466	1-216-025-00	METAL GLAZE	100	5%	1/10W
R467	1-216-033-00	METAL GLAZE	220	5%	1/10W
R468	1-216-033-00	METAL GLAZE	220	5%	1/10W
R469	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R470	1-216-033-00	METAL GLAZE	220	5%	1/10W
R471	1-216-033-00	METAL GLAZE	220	5%	1/10W
R472	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R473	1-216-295-00	METAL GLAZE	0	5%	1/10W
R474	1-216-295-00	METAL GLAZE	0	5%	1/10W
R475	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R476	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R477	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R478	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R479	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R480	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R481	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R482	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R483	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R485	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R486	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R488	1-216-295-00	METAL GLAZE	0	5%	1/10W
R494	1-216-025-00	METAL GLAZE	100	5%	1/10W
R495	1-216-025-00	METAL GLAZE	100	5%	1/10W
R496	1-216-025-00	METAL GLAZE	100	5%	1/10W
R497	1-216-033-00	METAL GLAZE	220	5%	1/10W
R498	1-216-025-00	METAL GLAZE	100	5%	1/10W
R499	1-216-025-00	METAL GLAZE	100	5%	1/10W
R500	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R501	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R502	1-216-033-00	METAL GLAZE	220	5%	1/10W
R503	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R504	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R507	1-216-295-00	METAL GLAZE	0	5%	1/10W
R509	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R510	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R512	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R513	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R515	1-216-295-00	METAL GLAZE	0	5%	1/10W
R517	1-216-025-00	METAL GLAZE	100	5%	1/10W
R518	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R519	1-216-295-00	METAL GLAZE	0	5%	1/10W
R521	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R522	1-216-033-00	METAL GLAZE	220	5%	1/10W
R523	1-216-033-00	METAL GLAZE	220	5%	1/10W
R524	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R525	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R526	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R527	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R528	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R529	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R531	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R532	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R533	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R535	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R536	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R537	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R538	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R539	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R540	1-216-025-00	METAL GLAZE	100	5%	1/10W
R541	1-216-025-00	METAL GLAZE	100	5%	1/10W
R542	1-216-025-00	METAL GLAZE	100	5%	1/10W
R543	1-216-025-00	METAL GLAZE	100	5%	1/10W
R546	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
R547	1-208-812-11	METAL CHIP	18K	0.50%	1/10W

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*A-1316-180-A G BOARD, COMPLETE
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REF.NO.	PART NO.	DESCRIPTION
	4-039-042-01	SPACER, INSULATING
	4-382-854-11	SCREW (M3X10), P, SW (+)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C601	1-161-830-00	CERAMIC	4700PF	10%	500V
C602	1-130-317-00	FILM	0.068MF	5%	100V
C603	1-124-634-11	ELECT	1MF	20%	250V
C605	1-164-143-11	CERAMIC	0.001MF	10%	1KV
C606	1-124-563-11	ELECT	2200MF	20%	25V
C607	1-124-563-11	ELECT	2200MF	20%	25V
C608	1-128-484-11	ELECT	100MF	20%	200V
C609	1-137-141-11	FILM	0.082MF	3%	600V
C612	1-124-962-11	ELECT	2200MF	20%	25V
C614	1-104-965-11	ELECT	10MF	0	160V
C615	1-124-798-11	ELECT	1MF	20%	160V
C616	1-124-557-11	ELECT	1000MF	20%	25V
C617	1-164-143-11	CERAMIC	0.001MF	10%	1KV

G

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION			REMARK
C618	1-136-853-11	FILM	0.56MF	5%	200V
C619	1-164-735-11	CAP, CERAMIC	1500PF		
C620	1-136-721-21	FILM	1.5MF	10%	400V
C621	1-164-143-11	CERAMIC	0.001MF	10%	1KV
C622	1-136-853-11	FILM	0.56MF	5%	200V
C623	1-137-087-11	FILM	0.068MF	3%	0
C624	1-126-771-11	ELECT	100MF	20%	160V
C625	1-126-183-11	ELECT	1000MF	20%	16V
C626	1-126-373-11	ELECT	470MF	20%	10V
C628	1-161-830-00	CERAMIC	4700PF	10%	500V
C629	1-128-550-11	ELECT	2200MF	20%	50V
C631	1-126-803-11	ELECT	47MF	20%	50V
C632	1-124-903-11	ELECT	1MF	20%	50V
C633	1-130-483-00	MYLAR	0.01MF	5%	50V
C634	1-126-803-11	ELECT	47MF	20%	16V
C637	⚠1-136-311-51	FILM	0.47MF	20%	125V
C638	⚠1-161-743-71	CERAMIC	0.0047MF		400V
C639	⚠1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C640	⚠1-136-311-51	FILM	0.47MF	20%	125V
C641	1-126-101-11	ELECT	100MF	20%	16V
C642	⚠1-161-743-71	CERAMIC	0.0047MF		400V
C644	1-126-104-11	ELECT	470MF	20%	35V
C646	1-124-907-11	ELECT	10MF	20%	50V
C647	⚠1-164-486-51	CERAMIC	0.0033MF	20%	400V
C648	⚠1-125-692-11	ELECT(BLOCK)	820MF	20%	200V
C649	⚠1-164-486-51	CERAMIC	0.0033MF	20%	400V
C650	⚠1-161-743-71	CERAMIC	0.0047MF		400V
C651	1-124-477-11	ELECT	47MF	20%	16V
C652	1-102-074-00	CERAMIC	0.001MF	10%	50V
C653	1-126-101-11	ELECT	100MF	20%	16V
C660	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C661	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C662	1-124-927-11	ELECT	4.7MF	20%	50V
C663	1-126-946-11	ELECT	6800MF	20%	16V
C664	1-126-946-11	ELECT	6800MF	20%	16V
C670	1-102-074-00	CERAMIC	0.001MF	10%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
G1	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
G2	*1-564-512-11	PLUG, CONNECTOR 9P
G3	*1-564-507-11	PLUG, CONNECTOR 4P
G4	*1-564-511-11	PLUG, CONNECTOR 8P
G5	*1-564-508-11	PLUG, CONNECTOR 5P
G6	*1-564-506-11	PLUG, CONNECTOR 3P
G7	*1-564-507-11	PLUG, CONNECTOR 4P
G8	*1-580-843-11	PIN, CONNECTOR (POWER)
G10	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
G11	*1-564-511-11	PLUG, CONNECTOR 8P

<DIODE>

REF.NO.	PART NO.	DESCRIPTION
D602	8-719-979-58	DIODE EGP10D
D603	8-719-500-67	DIODE D5KC40H
D604	8-719-510-09	DIODE D10SC6M
D605	8-719-988-31	DIODE D10SC6MR
D607	8-719-025-81	DIODE S3V10SB
D608	8-719-109-86	DIODE RD5.1ESB3
D609	8-719-109-84	DIODE RD5.1ESB1
D610	8-719-979-58	DIODE EGP10D
D611	8-719-979-58	DIODE EGP10D
D613	8-719-300-33	DIODE RU-3AM
D614	8-719-979-58	DIODE EGP10D
D615	8-719-975-76	DIODE SB140

REF.NO.	PART NO.	DESCRIPTION	REMARK
D616	8-719-025-81	DIODE S3V10SB	
D617	8-719-110-02	DIODE RD7.5ESB1	
D618	8-719-911-19	DIODE 1SS119	
D619	8-719-975-76	DIODE SB140	
D620	8-719-988-31	DIODE D10SC6MR	
D621	8-719-908-03	DIODE GP08D	
D622	8-719-908-03	DIODE GP08D	
D623	8-719-110-63	DIODE RD24ESB3	
D624	8-719-109-89	DIODE RD5.6ESB2	
D626	8-719-908-03	DIODE GP08D	
D628	8-719-110-49	DIODE RD18ESB2	
D629	8-719-911-19	DIODE 1SS119	
D631	8-719-911-19	DIODE 1SS119	
D632	8-719-511-40	DIODE S1VB40	
D633	⚠8-719-505-60	DIODE S5VB60	
D634	8-719-911-19	DIODE 1SS119	
D636	8-719-109-85	DIODE RD5.1ESB2	
D638	8-719-911-19	DIODE 1SS119	
D640	8-719-510-09	DIODE D10SC6M	
D650	8-719-160-81	DIODE RD27FB2	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION
F601	⚠1-576-193-11	FUSE 6.3A/125V
	1-533-223-11	CLIP, FUSE; F601

<FERRITE BEAD>

REF.NO.	PART NO.	DESCRIPTION
FB602	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB604	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB606	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB607	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB608	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB612	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB622	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH
FB630	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH
FB631	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH

<IC>

REF.NO.	PART NO.	DESCRIPTION
IC601	⚠8-749-921-89	IC SE115N
IC602	8-759-231-58	IC TA7812S

<COIL>

REF.NO.	PART NO.	DESCRIPTION	
L601	1-408-421-00	INDUCTOR	100UH
L602	1-459-862-11	COIL, CHOKE 90UH	
L604	1-408-404-00	INDUCTOR	3.9UH
L605	1-412-526-11	INDUCTOR	12UH
L607	1-408-404-00	INDUCTOR	3.9UH
L611	1-412-546-41	INDUCTOR	560UH
L612	1-412-540-31	INDUCTOR	180UH

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION
Q603	8-729-011-15	TRANSISTOR 2SC4582NP
Q604	8-729-119-80	TRANSISTOR 2SC2688-LK
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q608	8-729-326-11	TRANSISTOR 2SC2611
Q609	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q610	8-729-820-82	TRANSISTOR 2SA1208-S
Q611	8-729-820-82	TRANSISTOR 2SA1208-S
Q612	8-729-386-12	TRANSISTOR 2SB861-C
Q613	8-729-209-15	TRANSISTOR 2SD2012

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION				REMARK
Q614	8-729-011-15	TRANSISTOR 2SC4582NP				
Q615	8-729-820-82	TRANSISTOR 2SA1208-S				
Q616	8-729-017-05	TRANSISTOR 2SA1837				
Q618	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q620	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q621	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q622	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q623	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q624	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q625	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q626	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q627	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q629	8-729-378-84	TRANSISTOR 2SD788-5				
Q630	8-729-255-12	TRANSISTOR 2SC2551-0				

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R604	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R605	1-249-428-11	CARBON	8.2K	5%	1/4W	
R606	1-214-919-00	METAL	180K	1%	1/2W	
R609	1-249-434-11	CARBON	27K	5%	1/4W	F
R610	1-215-469-00	METAL	100K	1%	1/4W	
R611	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R612	1-202-883-11	SOLID	680K	20%	1/2W	
R613	⚠1-216-386-71	METAL OXIDE	0.56	5%	3W	F
R614	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R615	1-215-441-00	METAL	6.8K	1%	1/4W	
R616	1-215-436-00	METAL	4.3K	1%	1/4W	
R617	⚠1-216-356-71	METAL OXIDE	3.9	5%	1W	F
R618	1-249-418-11	CARBON	1.2K	5%	1/4W	
R619	⚠1-216-444-71	METAL OXIDE	82K	5%	1W	F
R620	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R621	1-249-396-11	CARBON	18	5%	1/4W	F
R622	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R623	1-249-417-11	CARBON	1K	5%	1/4W	
R624	1-215-471-00	METAL	120K	1%	1/4W	
R625	⚠1-216-386-71	METAL OXIDE	0.56	5%	3W	F
R626	⚠1-216-356-71	METAL OXIDE	3.9	5%	1W	F
R627	1-202-883-11	SOLID	680K	20%	1/2W	
R628	1-249-410-11	CARBON	270	5%	1/4W	F
R629	⚠1-217-249-11	WIREWOUND	1	10%	3W	F
R631	1-249-417-11	CARBON	1K	5%	1/4W	F
R632	1-215-469-00	METAL	100K	1%	1/4W	
R633	1-249-429-11	CARBON	10K	5%	1/4W	
R634	1-249-441-11	CARBON	100K	5%	1/4W	
R635	1-215-897-11	METAL OXIDE	6.8K	5%	2W	F
R636	1-249-383-11	CARBON	1.2	5%	1/4W	
R638	1-249-405-11	CARBON	100	5%	1/4W	F
R639	1-249-405-11	CARBON	100	5%	1/4W	F
R640	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R641	1-249-429-11	CARBON	10K	5%	1/4W	
R642	1-215-422-00	METAL	1.1K	1%	1/4W	
R643	1-249-441-11	CARBON	100K	5%	1/4W	
R644	1-249-415-11	CARBON	680	5%	1/4W	
R645	1-249-417-11	CARBON	1K	5%	1/4W	
R646	1-215-446-00	METAL	11K	1%	1/4W	
R649	1-249-424-11	CARBON	3.9K	5%	1/4W	
R650	1-249-377-11	CARBON	0.47	5%	1/4W	F
R651	1-215-429-00	METAL	2.2K	1%	1/4W	
☒R652	⚠	METAL			1/4W	
R654	1-215-429-00	METAL	2.2K	1%	1/4W	
R655	1-249-426-11	CARBON	5.6K	5%	1/4W	
R656	1-215-454-00	METAL	24K	1%	1/4W	
R657	⚠1-216-386-71	METAL OXIDE	0.56	5%	3W	F
R660	1-260-095-11	CARBON	470	5%	1/2W	
R661	⚠1-202-884-91	SOLID	820K	20%	1/2W	
R662	⚠1-205-900-11	WIREWOUND	1.2	5%	15W	
R663	⚠1-215-904-71	METAL OXIDE	100K	5%	2W	F
R666	1-249-377-11	CARBON	0.47	5%	1/4W	F
R667	⚠1-202-888-91	SOLID	2.2M	20%	1/2W	
R668	⚠1-215-904-71	METAL OXIDE	100K	5%	2W	F
R669	1-249-377-11	CARBON	0.47	5%	1/4W	F
R675	1-249-377-11	CARBON	0.47	5%	1/4W	F
R676	1-247-887-00	CARBON	220K	5%	1/4W	
R677	1-249-441-11	CARBON	100K	5%	1/4W	
R678	1-249-433-11	CARBON	22K	5%	1/4W	
R679	1-249-437-11	CARBON	47K	5%	1/4W	
R680	1-249-437-11	CARBON	47K	5%	1/4W	
R681	1-249-429-11	CARBON	10K	5%	1/4W	
R682	1-249-429-11	CARBON	10K	5%	1/4W	
R683	1-249-437-11	CARBON	47K	5%	1/4W	
R687	1-249-430-11	CARBON	12K	5%	1/4W	F
R689	1-247-742-11	CARBON	180	5%	1/2W	F
R691	1-249-433-11	CARBON	22K	5%	1/4W	
R694	1-249-421-11	CARBON	2.2K	5%	1/4W	
R697	1-249-382-11	CARBON	1.2	5%	1/4W	F
R698	⚠1-216-386-71	METAL OXIDE	0.56	5%	3W	F

<RELAY>

REF.NO.	PART NO.	DESCRIPTION
RY601	⚠1-515-805-21	RELAY, POWER
RY602	⚠1-515-805-21	RELAY, POWER

<TRANSFORMER>

REF.NO.	PART NO.	DESCRIPTION
T601	⚠1-426-664-11	TRANSFORMER, CONVERTER (PIT)
T603	⚠1-424-020-11	PRT
T604	⚠1-450-149-11	TRANSFORMER, HEATER
T605	⚠1-424-023-12	TRANSFORMER, LINE FILTER
T606	⚠1-421-372-21	TRANSFORMER, FERRITE (LFT)
T608	⚠1-423-665-11	TRANSFORMER, POWER

<VARISTOR>

REF.NO.	PART NO.	DESCRIPTION
VDR601	⚠1-809-786-11	VARISTOR

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*A-1331-337-A CR BOARD, COMPLETE
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	PART NO.	DESCRIPTION
	4-373-933-01	SHEET (TRANSISTOR), BN
	4-382-854-11	SCREW (M3X10), P, SW (+)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			
C701	1-162-115-00	CERAMIC	330PF	10%	2KV
C702	1-123-948-00	ELECT	22MF	20%	250V
C703	1-102-050-00	CERAMIC	0.01MF		500V
C704	1-162-115-00	CERAMIC	330PF	10%	2KV
C705	1-130-479-00	MYLAR	0.0047MF	5%	50V
C706	1-101-006-00	CERAMIC	0.047MF		50V
C707	1-101-006-00	CERAMIC	0.047MF		50V
C709	1-124-120-11	ELECT	220MF	20%	16V
C711	1-164-081-11	CERAMIC	470PF	10%	50V

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION
CR1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P

- *The components identified by* ☒ *in this manual* have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used

CR CG

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
CR3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CR4	*1-564-511-11	PLUG, CONNECTOR 8P	
CR15	*1-564-508-11	PLUG, CONNECTOR 5P	

<SOCKET>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CRT701 ⚠	1-251-179-11	SOCKET, PICTURE TUBE	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D701	8-719-911-19	DIODE 1SS119	
D702	8-719-911-19	DIODE 1SS119	
D703	8-719-911-19	DIODE 1SS119	
D704	8-719-911-19	DIODE 1SS119	
D705	8-719-911-19	DIODE 1SS119	
D706	8-719-911-19	DIODE 1SS119	
D708	1-249-410-11	CARBON 270 5% 1/4W	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L701	1-408-429-00	INDUCTOR 470UH	
L702	1-249-470-11	CARBON 0.47 5% 1/2W	F
L704	1-408-413-00	INDUCTOR 22UH	

<NEON LAMP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
NL701	1-519-108-99	LAMP, NEON	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q703	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q704	8-729-255-12	TRANSISTOR 2SC2551-0	
Q705	8-729-200-17	TRANSISTOR 2SA1091-0	
Q706	8-729-200-17	TRANSISTOR 2SA1091-0	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R701	1-202-847-00	SOLID 560K 20% 1/2W	
R702	1-202-814-11	SOLID 33K 20% 1/2W	
R705	1-202-828-11	SOLID 6.8K 20% 1/2W	
R706	1-202-561-00	SOLID 330 20% 1/2W	
R708	1-249-405-11	CARBON 100 5% 1/4W	F
R709	1-249-405-11	CARBON 100 5% 1/4W	F
R710 ⚠	1-215-927-71	METAL OXIDE 47K 5% 3W	F
R711	1-249-405-11	CARBON 100 5% 1/4W	F
R712	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R714	1-249-401-11	CARBON 47 5% 1/4W	
R716	1-247-807-31	CARBON 100 5% 1/4W	
R717	1-249-403-11	CARBON 68 5% 1/4W	
R718	1-249-412-11	CARBON 390 5% 1/4W	
R719	1-249-410-11	CARBON 270 5% 1/4W	
R722	1-215-399-00	METAL 120 1% 1/4W	
R724	1-215-409-00	METAL 330 1% 1/4W	
R726	1-215-924-00	METAL OXIDE 15K 5% 3W	F
R727	1-216-488-11	METAL OXIDE 18K 5% 3W	F

<SPARK GAP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
SG702	1-519-422-11	GAP, SPARK	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1331-338-A	CG BOARD, COMPLETE ******************	
	4-373-933-01	SHEET (TRANSISTOR), BN	
	4-382-854-11	SCREW (M3X10), P, SW (+)	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C731	1-162-115-00	CERAMIC 330PF 10% 2KV	
C732	1-123-948-00	ELECT 22MF 20% 250V	
C733	1-102-050-00	CERAMIC 0.01MF 500V	
C734	1-162-115-00	CERAMIC 330PF 10% 2KV	
C735	1-130-479-00	MYLAR 0.0047MF 5% 50V	
C736	1-101-006-00	CERAMIC 0.047MF 50V	
C737	1-101-006-00	CERAMIC 0.047MF 50V	
C739	1-124-120-11	ELECT 220MF 20% 16V	
C741	1-164-081-11	CERAMIC 470PF 10% 50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CG1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	
CG3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CG16	*1-564-508-11	PLUG, CONNECTOR 5P	

<SOCKET>

REF.NO.	PART NO.	DESCRIPTION	REMARK
CRT731 ⚠	1-251-179-11	SOCKET, PICTURE TUBE	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D731	8-719-911-19	DIODE 1SS119	
D732	8-719-911-19	DIODE 1SS119	
D733	8-719-911-19	DIODE 1SS119	
D734	8-719-911-19	DIODE 1SS119	
D735	8-719-911-19	DIODE 1SS119	
D736	8-719-911-19	DIODE 1SS119	
D737	8-719-911-19	DIODE 1SS119	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L731	1-408-429-00	INDUCTOR 470UH	
L732	1-249-470-11	CARBON 0.47 5% 1/2W	F
L734	1-408-413-00	INDUCTOR 22UH	

<NEON LAMP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
NL731	1-519-108-99	LAMP, NEON	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q732	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q733	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q734	8-729-255-12	TRANSISTOR 2SC2551-0	
Q735	8-729-200-17	TRANSISTOR 2SA1091-0	
Q736	8-729-200-17	TRANSISTOR 2SA1091-0	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R731	1-202-847-00	SOLID 560K 20% 1/2W	
R732	1-202-814-11	SOLID 33K 20% 1/2W	
R735	1-202-828-11	SOLID 6.8K 20% 1/2W	
R736	1-202-561-00	SOLID 330 20% 1/2W	
R738	1-249-405-11	CARBON 100 5% 1/4W	F
R739	1-249-405-11	CARBON 100 5% 1/4W	F
R740 ⚠	1-215-927-71	METAL OXIDE 47K 5% 3W	F

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Ne les remplacer que par une piece portant le numero specifie

REF.NO.	PART NO.	DESCRIPTION	REMARK
R741	1-249-405-11	CARBON 100 5% 1/4W	F
R742	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R744	1-249-401-11	CARBON 47 5% 1/4W	
R745	1-215-455-00	METAL 27K 1% 1/4W	
R746	1-247-807-31	CARBON 100 5% 1/4W	
R747	1-249-403-11	CARBON 68 5% 1/4W	
R748	1-249-412-11	CARBON 390 5% 1/4W	
R749	1-249-410-11	CARBON 270 5% 1/4W	
R752	1-215-399-00	METAL 120 1% 1/4W	
R754	1-215-409-00	METAL 330 1% 1/4W	
R756	1-215-924-00	METAL OXIDE 15K 5% 3W	F
R757	1-216-488-11	METAL OXIDE 18K 5% 3W	F

<SPARK GAP>

SG732	1-519-422-11	GAP, SPARK	

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*A-1331-339-A CB BOARD, COMPLETE
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4-373-933-01	SHEET (TRANSISTOR), BN	
4-382-854-11	SCREW (M3X10), P, SW (+)	

<CAPACITOR>

C761	1-162-115-00	CERAMIC	330PF	10%	2KV
C762	1-123-948-00	ELECT	22MF	20%	250V
C763	1-102-050-00	CERAMIC	0.01MF		500V
C764	1-162-115-00	CERAMIC	330PF	10%	2KV
C765	1-130-479-00	MYLAR	0.0047MF	5%	50V
C766	1-101-006-00	CERAMIC	0.047MF		50V
C767	1-101-006-00	CERAMIC	0.047MF		50V
C769	1-124-120-11	ELECT	220MF	20%	16V
C771	1-164-081-11	CERAMIC	470PF	10%	50V

<CONNECTOR>

CB1	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
CB3	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
CB4	*1-564-511-11	PLUG, CONNECTOR 8P
CB5	*1-564-511-61	PLUG, CONNECTOR 8P
CB17	*1-564-508-11	PLUG, CONNECTOR 5P

<SOCKET>

CRT761 ⚠	1-251-179-11	SOCKET, PICTURE TUBE

<DIODE>

D761	8-719-911-19	DIODE 1SS119
D762	8-719-911-19	DIODE 1SS119
D763	8-719-911-19	DIODE 1SS119
D764	8-719-911-19	DIODE 1SS119
D765	8-719-911-19	DIODE 1SS119
D766	8-719-911-19	DIODE 1SS119
D768	8-719-911-19	DIODE 1SS119
D769	8-719-109-81	DIODE RD4.7ESB2

<COIL>

L761	1-408-429-00	INDUCTOR 470UH	
L762	1-249-470-11	CARBON 0.47 5% 1/2W	F
L764	1-408-413-00	INDUCTOR 22UH	

REF.NO.	PART NO.	DESCRIPTION	REMARK

<NEON LAMP>

NL761	1-519-108-99	LAMP, NEON

<TRANSISTOR>

Q762	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q763	8-729-119-80	TRANSISTOR 2SC2688-LK
Q764	8-729-255-12	TRANSISTOR 2SC2551-0
Q765	8-729-200-17	TRANSISTOR 2SA1091-0
Q766	8-729-200-17	TRANSISTOR 2SA1091-0

<RESISTOR>

R761	1-202-847-00	SOLID 560K 20% 1/2W	
R762	1-202-814-11	SOLID 33K 20% 1/2W	
R764	1-202-842-11	SOLID 220K 20% 1/2W	
R765	1-202-828-11	SOLID 6.8K 20% 1/2W	
R766	1-202-561-00	SOLID 330 20% 1/2W	
R768	1-249-405-11	CARBON 100 5% 1/4W	F
R769	1-249-405-11	CARBON 100 5% 1/4W	F
R770 ⚠	1-215-927-71	METAL OXIDE 47K 5% 3W	F
R771	1-249-405-11	CARBON 100 5% 1/4W	F
R772	1-249-421-11	CARBON 2.2K 5% 1/4W	F
R773	1-249-413-11	CARBON 470 5% 1/4W	
R774	1-249-401-11	CARBON 47 5% 1/4W	
R776	1-247-807-31	CARBON 100 5% 1/4W	
R777	1-249-403-11	CARBON 68 5% 1/4W	
R778	1-249-412-11	CARBON 390 5% 1/4W	
R779	1-249-414-11	CARBON 560 5% 1/4W	
R782	1-215-399-00	METAL 120 1% 1/4W	
R784	1-215-409-00	METAL 330 1% 1/4W	
R785	1-215-418-00	METAL 750 1% 1/4W	
R786	1-215-924-00	METAL OXIDE 15K 5% 3W	F
R787	1-216-488-11	METAL OXIDE 18K 5% 3W	F

<SPARK GAP>

SG762	1-519-422-11	GAP, SPARK

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*1-650-883-11 DS BOARD
****

<CAPACITOR>

C1841	1-126-233-11	ELECT	22MF	20%	25V
C1842	1-126-233-11	ELECT	22MF	20%	25V

<CONNECTOR>

DS6	1-691-182-11	CONNECTOR (BOARD TO BOARD) 12P

<DIODE>

D1841	8-719-911-19	DIODE 1SS119
D1842	8-719-911-19	DIODE 1SS119
D1843	8-719-911-19	DIODE 1SS119
D1844	8-719-911-19	DIODE 1SS119

<IC>

IC1801	8-759-183-37	IC CA0007AD

DS **D**

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
R1841	1-215-441-00	METAL	6.8K	1%	1/4W
R1842	1-215-455-00	METAL	27K	1%	1/4W
R1844	1-215-445-00	METAL	10K	1%	1/4W
R1850	1-215-429-00	METAL	2.2K	1%	1/4W
R1851	1-215-421-00	METAL	1K	1%	1/4W

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*A-1341-751-A D BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C901	1-126-320-11	ELECT	10MF	20%	16V
C902	1-124-477-11	ELECT	47MF	20%	16V
C903	1-130-471-00	MYLAR	0.001MF	5%	50V
C904	1-130-471-00	MYLAR	0.001MF	5%	50V
C905	1-124-477-11	ELECT	47MF	20%	16V
C906	1-126-233-11	ELECT	22MF	20%	50V
C907	1-126-101-11	ELECT	100MF	20%	16V
C908	1-124-907-11	ELECT	10MF	20%	50V
C910	1-130-483-00	MYLAR	0.01MF	5%	50V
C911	1-131-341-00	TANTALUM	0.1MF	20%	16V
C912	1-124 903-11	ELECT	1MF	20%	50V
C913	1-126-233-11	ELECT	22MF	20%	50V
C914	1-126-803-11	ELECT	47MF	20%	16V
C915	1-124-927-11	ELECT	4.7MF	20%	50V
C916	1-102-074-00	CERAMIC	0.001MF	10%	50V
C917	1-130 471-00	MYLAR	0.001MF	5%	50V
C918	1-102-963-00	CERAMIC	33PF	5%	50V
C919	1-102-963-00	CERAMIC	33PF	5%	50V
C920	1-102-963-00	CERAMIC	33PF	5%	50V
C921	1-102-963-00	CERAMIC	33PF	5%	50V
C922	1-102-963-00	CERAMIC	33PF	5%	50V
C923	1-102-963-00	CERAMIC	33PF	5%	50V
C931	1-102-973-00	CERAMIC	100PF	5%	50V
C932	1-124-903-11	ELECT	1MF	20%	50V
C934	1-126-233-11	ELECT	22MF	20%	25V
C935	1-126-233-11	ELECT	22MF	20%	25V
C936	1-126-233-11	ELECT	22MF	20%	25V
C937	1-126-233-11	ELECT	22MF	20%	25V
C938	1-126-233-11	ELECT	22MF	20%	25V
C939	1-126-233-11	ELECT	22MF	20%	25V
C940	1-126-233-11	ELECT	22MF	20%	25V
C1701	1-124-907-11	ELECT	10MF	20%	50V
C1702	1-124-907-11	ELECT	10MF	20%	50V
C1703	1-124-907-11	ELECT	10MF	20%	50V
C1704	1-124-667-11	ELECT	10MF	20%	50V
C1705	1-102-963-00	CERAMIC	33PF	5%	50V
C1706	1-102-963-00	CERAMIC	33PF	5%	50V
C1707	1-102-963-00	CERAMIC	33PF	5%	50V
C1708	1-102-963-00	CERAMIC	33PF	5%	50V
C1709	1-102-963-00	CERAMIC	33PF	5%	50V
C1710	1-102-963-00	CERAMIC	33PF	5%	50V
C1711	1-126-233-11	ELECT	22MF	20%	50V
C1712	1-126-233-11	ELECT	22MF	20%	25V
C1713	1-131-353-00	TANTALUM	10MF	10%	25V
C1714	1-124-120-11	ELECT	220MF	20%	25V
C1715	1-124-478-11	ELECT	100MF	20%	25V
C1716	1-126-803 11	ELECT	47MF	20%	25V
C1717	1-126-803-11	ELECT	47MF	20%	25V
C1718	1-131-353-00	TANTALUM	10MF	10%	25V
C1719	1-126-233-11	ELECT	22MF	20%	25V
C1720	1-130-491-00	MYLAR	0.047MF	5%	50V
C1721	1-130-491-00	MYLAR	0.047MF	5%	50V
C1722	1-130-491-00	MYLAR	0.047MF	5%	50V
C1724	1-126-233-11	ELECT	22MF	20%	25V
C1725	1-102-963-00	CERAMIC	33PF	5%	50V
C1726	1-124-122-11	ELECT	100MF	20%	35V
C1727	1-102-963-00	CERAMIC	33PF	5%	50V
C1728	1-102-963-00	CERAMIC	33PF	5%	50V
C1729	1-106-377-00	MYLAR	0.027MF		200V
C1730	1-102-963-00	CERAMIC	33PF	5%	50V
C1731	1-124-122-11	ELECT	100MF	20%	35V
C1732	1-106-377-00	MYLAR	0.027MF		200V
C1733	1-102-963-00	CERAMIC	33PF	5%	50V
C1734	1-102-963-00	CERAMIC	33PF	5%	50V
C1735	1-124-122-11	ELECT	100MF	20%	35V
C1736	1-106-377-00	MYLAR	0.027MF		200V
C1737	1-124-937-11	ELECT	10MF	20%	16V
C1738	1-124-122-11	ELECT	100MF	20%	35V
C1739	1-136-153-00	FILM	0.01MF	5%	50V
C1740	1-124-122-11	ELECT	100MF	20%	35V
C1741	1-124-122-11	ELECT	100MF	20%	35V
C1742	1-126-104-11	ELECT	470MF	20%	35V
C1744	1-124-120-11	ELECT	220MF	20%	25V
C1745	1-126-375-11	ELECT	100MF	20%	25V
C1755	1-106-220-00	MYLAR	0.1MF	10%	100V
C1756	1-106-220-00	MYLAR	0.1MF	10%	100V
C1757	1-106-220-00	MYLAR	0.1MF	10%	100V
C1758	1-106-220-00	MYLAR	0.1MF	10%	100V
C1759	1-106-220-00	MYLAR	0.1MF	10%	100V
C1760	1-106-220-00	MYLAR	0.1MF	10%	100V
C1763	1-124-907-11	ELECT	10MF	20%	50V
C1764	1-124-477-11	ELECT	47MF	20%	16V
C1765	1-124-477-11	ELECT	47MF	20%	16V
C1766	1-126-101-11	ELECT	100MF	20%	16V
C1769	1-124-907-11	ELECT	10MF	20%	50V
C1770	1-130-495-00	MYLAR	0.1MF	5%	50V
C1771	1-124-907-11	ELECT	10MF	20%	50V
C1772	1-124-907-11	ELECT	10MF	20%	50V
C1861	1-102-074-00	CERAMIC	0.001MF	10%	50V

<CONNECTOR>

D1	*1-564-510-11	PLUG, CONNECTOR	7P
D2	*1-564-511-11	PLUG, CONNECTOR	8P
D3	*1-564-512-11	PLUG, CONNECTOR	9P
D4	*1-564-508-11	PLUG, CONNECTOR	5P
D5	*1-564-511-11	PLUG, CONNECTOR	8P
D6	1-691-169-11	PIN, CONNECTOR	12P
D7	*1-564-507-11	PLUG, CONNECTOR	4P
D8	*1-564-506-11	PLUG, CONNECTOR	3P
D9	*1-564-507-11	PLUG, CONNECTOR	4P
D14	*1-564-513-11	PLUG, CONNECTOR	10P

<DIODE>

D901	8-719-911-19	DIODE 1SS119
D902	8-719-911-19	DIODE 1SS119
D1702	8-719-911-19	DIODE 1SS119
D1704	8-719-900-95	DIODE V09G
D1705	8-719-900-95	DIODE V09G
D1706	8-719-900-95	DIODE V09G

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1707	8-719-911-19	DIODE 1SS119	
D1708	8-719-911-19	DIODE 1SS119	
D1709	8-719-911-19	DIODE 1SS119	
D1710	8-719-911-19	DIODE 1SS119	
D1711	8-719-911-19	DIODE 1SS119	
D1712	8-719-911-19	DIODE 1SS119	
D1713	8-719-911-19	DIODE 1SS119	
D1714	8-719-911-19	DIODE 1SS119	
D1715	8-719-911-19	DIODE 1SS119	
D1716	8-719-911-19	DIODE 1SS119	
D1717	8-719-911-19	DIODE 1SS119	
D1718	8-719-911-19	DIODE 1SS119	
D1720	8-719-109-50	DIODE RD2.0ESB1	
D1721	8-719-109-50	DIODE RD2.0ESB1	
D1722	8-719-109-50	DIODE RD2.0ESB1	
D1723	8-719-109-50	DIODE RD2.0ESB1	

<FUSE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
F901 ⚠	1-576-107-22	FUSE 3.15A/250V	
	1-533-223-11	CLIP, FUSE; F901	
F902 ⚠	1-576-107-22	FUSE 3.15A/250V	
	1-533-223-11	CLIP, FUSE; F902	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC901	8-759-145-58	IC UPC4558C	
IC902	8-752-033-68	IC CXA1268P	
IC903	8-759-701-56	IC NJM78M05FA	
IC904	8-759-701-65	IC NJM79M05FA	
IC905	8-759-701-89	IC NJM7915FA	
IC906	8-759-148-84	IC UPC2415HF	
IC907	8-759-140-53	IC UPD4053BC	
IC908	8-759-145-58	IC UPC4558C	
IC910	8-759-054-40	IC PA0036	
IC1701	8-759-602-19	IC M5220L	
IC1702	8-759-602-19	IC M5220L	
IC1703	8-759-602-19	IC M5220L	
IC1704	8-749-923-16	IC STK4278-L	
IC1705	8-749-923-16	IC STK4278-L	
IC1706	8-759-113-13	IC UPC1498H	
IC1707	8-759-113-13	IC UPC1498H	
IC1708	8-759-113-13	IC UPC1498H	
IC1709	8-759-145-58	IC UPC4558C	
IC1710	8-759-145-58	IC UPC4558C	
IC1714	8-759-145-58	IC UPC4558C	
IC1715	8-759-145-58	IC UPC4558C	
IC1718	8-759-145-58	IC UPC4558C	

<CIOL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L901	1-459-313-00	COIL WITH CORE (HWC)	
L901	1-459-313-00	COIL WITH CORE (HWC)	
L902	1-459-313-00	COIL WITH CORE (HWC)	
L902	1-459-313-00	COIL WITH CORE (HWC)	
L903	1-459-313-00	COIL WITH CORE (HWC)	
L903	1-459-313-00	COIL WITH CORE (HWC)	
L904	1-459-313-00	COIL WITH CORE (HWC)	
L904	1-459-313-00	COIL WITH CORE (HWC)	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q902	8-729-900-89	TRANSISTOR DTC144ES	
Q906	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q908	8-729-900-89	TRANSISTOR DTC144ES	
Q909	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q910	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q911	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R901	1-215-463-00	METAL 56K 1% 1/4W	
R902	1-215-463-00	METAL 56K 1% 1/4W	
R903	1-215-449-00	METAL 15K 1% 1/4W	
R904	1-215-455-00	METAL 27K 1% 1/4W	
R905	1-215-449-00	METAL 15K 1% 1/4W	
R906	1-215-469-00	METAL 100K 1% 1/4W	
R907	1-215-469-00	METAL 100K 1% 1/4W	
R908	1-215-469-00	METAL 100K 1% 1/4W	
R909	1-215-473-00	METAL 150K 1% 1/4W	
R910	1-215-437-00	METAL 4.7K 1% 1/4W	
R911	1-215-453-00	METAL 22K 1% 1/4W	
R912	1-215-453-00	METAL 22K 1% 1/4W	
R913	1-215-437-00	METAL 4.7K 1% 1/4W	
R914	1-215-453-00	METAL 22K 1% 1/4W	
R915	1-215-435-00	METAL 3.9K 1% 1/4W	
R916	1-215-457-00	METAL 33K 1% 1/4W	
R919	1-215-399-00	METAL 120 1% 1/4W	
R920	1-215-399-00	METAL 120 1% 1/4W	
R921	1-215-399-00	METAL 120 1% 1/4W	
R922	1-215-399-00	METAL 120 1% 1/4W	
R923	1-215-441-00	METAL 6.8K 1% 1/4W	
R924	1-215-441-00	METAL 6.8K 1% 1/4W	
R925	1-215-441-00	METAL 6.8K 1% 1/4W	
R926	1-215-463-00	METAL 56K 1% 1/4W	
R927	1-215-463-00	METAL 56K 1% 1/4W	
R928	1-215-461-00	METAL 47K 1% 1/4W	
R929	1-215-433-00	METAL 3.3K 1% 1/4W	
R930	1-215-433-00	METAL 3.3K 1% 1/4W	
R931	1-215-433-00	METAL 3.3K 1% 1/4W	
R932	1-215-433-00	METAL 3.3K 1% 1/4W	
R933	1-215-433-00	METAL 3.3K 1% 1/4W	
R934	1-215-433-00	METAL 3.3K 1% 1/4W	
R935	1-215-439-00	METAL 5.6K 1% 1/4W	
R936	1-215-439-00	METAL 5.6K 1% 1/4W	
R937	1-215-439-00	METAL 5.6K 1% 1/4W	
R938	1-215-417-00	METAL 680 1% 1/4W	
R939	1-215-433-00	METAL 3.3K 1% 1/4W	
R940	1-215-429-00	METAL 2.2K 1% 1/4W	
R941	1-215-441-00	METAL 6.8K 1% 1/4W	
R942	1-215-451-00	METAL 18K 1% 1/4W	
R943	1-215-441-00	METAL 6.8K 1% 1/4W	
R944	1-215-439-00	METAL 5.6K 1% 1/4W	
R945	1-215-445-00	METAL 10K 1% 1/4W	
R946	1-215-445-00	METAL 10K 1% 1/4W	
R947	1-215-439-00	METAL 5.6K 1% 1/4W	
R948	1-215-455-00	METAL 27K 1% 1/4W	
R949	1-215-439-00	METAL 5.6K 1% 1/4W	
R950	1-215-429-00	METAL 2.2K 1% 1/4W	
R951	1-215-429-00	METAL 2.2K 1% 1/4W	
R952	1-215-437-00	METAL 4.7K 1% 1/4W	
R953	1-215-439-00	METAL 5.6K 1% 1/4W	
R954	1-215-439-00	METAL 5.6K 1% 1/4W	
R955	1-215-435-00	METAL 3.9K 1% 1/4W	
R956	1-215-437-00	METAL 4.7K 1% 1/4W	
R957	1-215-441-00	METAL 6.8K 1% 1/4W	

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R958	1-215-437-00	METAL	4.7K	1%	1/4W	
R959	1-215-439-00	METAL	5.6K	1%	1/4W	
R960	1-215-439-00	METAL	5.6K	1%	1/4W	
R961	1-215-439-00	METAL	5.6K	1%	1/4W	
R962	1-215-441-00	METAL	6.8K	1%	1/4W	
R963	1-215-441-00	METAL	6.8K	1%	1/4W	
R964	1-215-441-00	METAL	6.8K	1%	1/4W	
R965 ⚠	1-215-909-71	METAL OXIDE	47	5%	3W	F
R966	1-215-469-00	METAL	100K	1%	1/4W	
R967	1-215-421-00	METAL	1K	1%	1/4W	
R968	1-215-437-00	METAL	4.7K	1%	1/4W	
R969	1-249-421-11	CARBON	2.2K	5%	1/4W	
R970 ⚠	1-215-909-71	METAL OXIDE	47	5%	3W	F
R971	1-249-421-11	CARBON	2.2K	5%	1/4W	
R972	1-249-431-11	CARBON	15K	5%	1/4W	
R973	1-249-431-11	CARBON	15K	5%	1/4W	
R974	1-215-399-00	METAL	120	1%	1/4W	
R975	1-215-399-00	METAL	120	1%	1/4W	
R976	1-215-399-00	METAL	120	1%	1/4W	
R977	1-215-399-00	METAL	120	1%	1/4W	
R978	1-215-399-00	METAL	120	1%	1/4W	
R979	1-215-399-00	METAL	120	1%	1/4W	
R980	1-215-399-00	METAL	120	1%	1/4W	
R981	1-215-399-00	METAL	120	1%	1/4W	
R982	1-249-431-11	CARBON	15K	5%	1/4W	
R983	1-249-431-11	CARBON	15K	5%	1/4W	
R984	1-214-960-00	METAL	3.9	1%	1/2W	
R985	1-214-960-00	METAL	3.9	1%	1/2W	
R986	1-214-960-00	METAL	3.9	1%	1/2W	
R987	1-215-421-00	METAL	1K	1%	1/4W	
R988	1-215-421-00	METAL	1K	1%	1/4W	
R989	1-215-421-00	METAL	1K	1%	1/4W	
R990	1-215-421-00	METAL	1K	1%	1/4W	
R991	1-215-421-00	METAL	1K	1%	1/4W	
R992	1-215-421-00	METAL	1K	1%	1/4W	
R993	1-249-429-11	CARBON	10K	5%	1/4W	
R994	1-249-429-11	CARBON	10K	5%	1/4W	
R995	1-215-457-00	METAL	33K	1%	1/4W	
R999	1-215-455-00	METAL	27K	1%	1/4W	
R1701	1-249-411-11	CARBON	330	5%	1/4W	
R1702	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1703	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1704	1-249-411-11	CARBON	330	5%	1/4W	
R1705	1-249-411-11	CARBON	330	5%	1/4W	
R1706	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1707	1-249-411-11	CARBON	330	5%	1/4W	
R1708	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1709	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1710	1-249-411-11	CARBON	330	5%	1/4W	
R1711	1-249-411-11	CARBON	330	5%	1/4W	
R1712	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1713 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1714	1-249-411-11	CARBON	330	5%	1/4W	
R1715	1-249-411-11	CARBON	330	5%	1/4W	
R1716 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1717	1-249-411-11	CARBON	330	5%	1/4W	
R1718	1-249-417-11	CARBON	1K	5%	1/4W	
R1719	1-214-792-00	METAL	1	1%	1/2W	
R1720	1-249-411-11	CARBON	330	5%	1/4W	
R1721	1-249-417-11	CARBON	1K	5%	1/4W	
R1722	1-249-411-11	CARBON	330	5%	1/4W	
R1723	1-249-417-11	CARBON	1K	5%	1/4W	
R1724 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1725 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1726 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1727	1-214-792-00	METAL	1	1%	1/2W	
R1728	1-214-792-00	METAL	1	1%	1/2W	
R1729	1-214-792-00	METAL	1	1%	1/2W	
R1730	1-247-807-31	CARBON	100	5%	1/4W	
R1731	1-249-417-11	CARBON	1K	5%	1/4W	
R1732	1-247-807-31	CARBON	100	5%	1/4W	
R1733	1-247-807-31	CARBON	100	5%	1/4W	
R1734	1-247-807-31	CARBON	100	5%	1/4W	
R1735	1-247-807-31	CARBON	100	5%	1/4W	
R1736	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1737	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1738	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1739	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1740	1-249-417-11	CARBON	1K	5%	1/4W	
R1741	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1742	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1743	1-249-417-11	CARBON	1K	5%	1/4W	
R1744	1-249-411-11	CARBON	330	5%	1/4W	
R1745	1-247-807-31	CARBON	100	5%	1/4W	
R1746	1-214-792-00	METAL	1	1%	1/2W	
R1747 ⚠	1-215-886-71	METAL OXIDE	100	5%	2W	F
R1748	1-215-421-00	METAL	1K	1%	1/4W	
R1749	1-215-421-00	METAL	1K	1%	1/4W	
R1750	1-215-421-00	METAL	1K	1%	1/4W	
R1751	1-215-421-00	METAL	1K	1%	1/4W	
R1752	1-215-421-00	METAL	1K	1%	1/4W	
R1753	1-215-421-00	METAL	1K	1%	1/4W	
R1754	1-214-792-00	METAL	1	1%	1/2W	
R1755	1-215-469-00	METAL	100K	1%	1/4W	
R1756	1-215-443-00	METAL	8.2K	1%	1/4W	
R1757	1-215-437-00	METAL	4.7K	1%	1/4W	
R1758	1-215-437-00	METAL	4.7K	1%	1/4W	
R1759	1-247-807-31	CARBON	100	5%	1/4W	
R1760	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1761	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1762	1-215-445-00	METAL	10K	1%	1/4W	
R1763	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1764	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1765	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1766	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1767	1-249-427-11	CARBON	6.8K	5%	1/4W	
R1768	1-249-439-11	CARBON	68K	5%	1/4W	
R1769	1-215-445-00	METAL	10K	1%	1/4W	
R1770	1-247-807-31	CARBON	100	5%	1/4W	
R1771	1-247-807-31	CARBON	100	5%	1/4W	
R1772	1-215-429-00	METAL	2.2K	1%	1/4W	
R1773	1-215-429-00	METAL	2.2K	1%	1/4W	
R1774	1-215-421-00	METAL	1K	1%	1/4W	
R1775	1-249-429-11	CARBON	10K	5%	1/4W	
R1776	1-215-421-00	METAL	1K	1%	1/4W	
R1777	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1778	1-215-421-00	METAL	1K	1%	1/4W	
R1779 ⚠	1-215-898-71	METAL OXIDE	10K	5%	2W	F
R1780	1-214-960-00	METAL	3.9	1%	1/2W	
R1781	1-214-960-00	METAL	3.9	1%	1/2W	
R1782 ⚠	1-215-898-71	METAL OXIDE	10K	5%	2W	F
R1783	1-214-960-00	METAL	3.9	1%	1/2W	
R1784	1-214-960-00	METAL	3.9	1%	1/2W	
R1785 ⚠	1-215-898-71	METAL OXIDE	10K	5%	2W	F
R1786	1-214-960-00	METAL	3.9	1%	1/2W	
R1787	1-214-960-00	METAL	3.9	1%	1/2W	
R1788	1-249-433-11	CARBON	22K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1789	1-249-441-11	CARBON	100K	5%	1/4W	
R1790	1-249-433-11	CARBON	22K	5%	1/4W	
R1791	1-249-429-11	CARBON	10K	5%	1/4W	
R1792	1-215-445-00	METAL	10K	1%	1/4W	
R1793	1-247-807-31	CARBON	100	5%	1/4W	
R1794	1-215-429-00	METAL	2.2K	1%	1/4W	
R1795	1-249-433-11	CARBON	22K	5%	1/4W	
R1796	1-247-807-31	CARBON	100	5%	1/4W	
R1797	1-249-429-11	CARBON	10K	5%	1/4W	
R1798	1-249-423-11	CARBON	3.3K	5%	1/4W	
R1800	1-247-807-31	CARBON	100	5%	1/4W	
R1801	1-215-439-00	METAL	5.6K	1%	1/4W	
R1802	1-215-439-00	METAL	5.6K	1%	1/4W	
R1803	1-215-439-00	METAL	5.6K	1%	1/4W	
R1805	1-215-439-00	METAL	5.6K	1%	1/4W	
R1806	1-247-807-31	CARBON	100	5%	1/4W	
R1807	1-247-807-31	CARBON	100	5%	1/4W	
R1808	1-214-792-00	METAL	1	1%	1/2W	
R1809	1-214-792-00	METAL	1	1%	1/2W	
R1810	1-214-792-00	METAL	1	1%	1/2W	
R1811	1-214-792-00	METAL	1	1%	1/2W	
R1812	1-214-792-00	METAL	1	1%	1/2W	
R1813	1-214-792-00	METAL	1	1%	1/2W	
R1814	1-249-431-11	CARBON	15K	5%	1/4W	
R1815	1-247-885-00	CARBON	180K	5%	1/4W	
R1816	1-249-431-11	CARBON	15K	5%	1/4W	
R1817	1-247-885-00	CARBON	180K	5%	1/4W	
R1818	1-247-807-31	CARBON	100	5%	1/4W	
R1819	1-215-437-00	METAL	4.7K	1%	1/4W	
R1820	1-215-437-00	METAL	4.7K	1%	1/4W	
R1821	1-215-437-00	METAL	4.7K	1%	1/4W	
R1822	1-215-445-00	METAL	10K	1%	1/4W	
R1823	1-215-445-00	METAL	10K	1%	1/4W	
R1824	1-215-433-00	METAL	3.3K	1%	1/4W	
R1825	1-215-433-00	METAL	3.3K	1%	1/4W	
R1826	1-215-433-00	METAL	3.3K	1%	1/4W	
R1827	1-215-445-00	METAL	10K	1%	1/4W	
R1828	1-215-445-00	METAL	10K	1%	1/4W	
R1829	1-249-434-11	CARBON	27K	5%	1/4W	
R1830	1-249-434-11	CARBON	27K	5%	1/4W	
R1831	1-247-807-31	CARBON	100	5%	1/4W	
R1832	1-215-471-00	METAL	120K	1%	1/4W	
R1833	1-215-471-00	METAL	120K	1%	1/4W	
R1834	1-215-471-00	METAL	120K	1%	1/4W	
R1835	1-215-437-00	METAL	4.7K	1%	1/4W	
R1836	1-215-437-00	METAL	4.7K	1%	1/4W	
R1837	1-215-421-00	METAL	1K	1%	1/4W	
R1838	1-249-431-11	CARBON	15K	5%	1/4W	
R1839	1-249-431-11	CARBON	15K	5%	1/4W	
R1858	1-215-445-00	METAL	10K	1%	1/4W	
R1859	1-215-445-00	METAL	10K	1%	1/4W	
R1860	1-215-397-00	METAL	100	1%	1/4W	
R1861	1-215-453-00	METAL	22K	1%	1/4W	
R1862	1-215-453-00	METAL	22K	1%	1/4W	
R1863	1-215-397-00	METAL	100	1%	1/4W	
R1864	1-215-437-00	METAL	4.7K	1%	1/4W	
R1865	1-215-453-00	METAL	22K	1%	1/4W	
R1866	1-215-453-00	METAL	22K	1%	1/4W	
R1867	1-215-437-00	METAL	4.7K	1%	1/4W	
R1868	1-215-469-00	METAL	100K	1%	1/4W	
R1869	1-215-445-00	METAL	10K	1%	1/4W	
R1870	1-215-445-00	METAL	10K	1%	1/4W	
R1871	1-215-445-00	METAL	10K	1%	1/4W	
R1872	1-215-437-00	METAL	4.7K	1%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1873	1-215-437-00	METAL	4.7K	1%	1/4W	
R1874	1-215-437-00	METAL	4.7K	1%	1/4W	
R1875	1-215-437-00	METAL	4.7K	1%	1/4W	
R1876	1-215-437-00	METAL	4.7K	1%	1/4W	
R1877	1-215-437-00	METAL	4.7K	1%	1/4W	
R1878	1-215-475-00	METAL	180K	1%	1/4W	
R1879	1-215-475-00	METAL	180K	1%	1/4W	
R1880	1-215-475-00	METAL	180K	1%	1/4W	
R1882	1-215-445-00	METAL	10K	1%	1/4W	
R1883	1-215-453-00	METAL	22K	1%	1/4W	
R1884	1-215-397-00	METAL	100	1%	1/4W	
R1885	1-215-445-00	METAL	10K	1%	1/4W	
R1886	1-215-455-00	METAL	27K	1%	1/4W	
R1887	1-215-397-00	METAL	100	1%	1/4W	
R1889	1-215-457-00	METAL	33K	1%	1/4W	
R1890	1-215-449-00	METAL	15K	1%	1/4W	
R1892	1-215-445-00	METAL	10K	1%	1/4W	
R1894	1-215-429-00	METAL	2.2K	1%	1/4W	
R1895	1-215-445-00	METAL	10K	1%	1/4W	
R1896	1-215-445-00	METAL	10K	1%	1/4W	
R1897	1-215-445-00	METAL	10K	1%	1/4W	
R1898	1-215-445-00	METAL	10K	1%	1/4W	
R1899	1-215-421-00	METAL	1K	1%	1/4W	
R1900	1-215-429-00	METAL	2.2K	1%	1/4W	
R1901	1-215-449-00	METAL	15K	1%	1/4W	
R1902	1-215-445-00	METAL	10K	1%	1/4W	
R1903	1-215-445-00	METAL	10K	1%	1/4W	
R1904	1-215-445-00	METAL	10K	1%	1/4W	
R1905	1-215-445-00	METAL	10K	1%	1/4W	
R1906	1-215-429-00	METAL	2.2K	1%	1/4W	
R1907	1-215-445-00	METAL	10K	1%	1/4W	
R1908	1-215-445-00	METAL	10K	1%	1/4W	
R1909	1-215-445-00	METAL	10K	1%	1/4W	
R1910	1-215-445-00	METAL	10K	1%	1/4W	
R1911	1-215-453-00	METAL	22K	1%	1/4W	
R1916	1-215-423-00	METAL	1.2K	1%	1/4W	
R1920	1-215-453-00	METAL	22K	1%	1/4W	
R1921	1-215-445-00	METAL	10K	1%	1/4W	
R1922	1-215-445-00	METAL	10K	1%	1/4W	
R1924	1-215-429-00	METAL	2.2K	1%	1/4W	
R1925	1-215-429-00	METAL	2.2K	1%	1/4W	
R1926	1-215-429-00	METAL	2.2K	1%	1/4W	
R1927	1-215-445-00	METAL	10K	1%	1/4W	
R1928	1-215-421-00	METAL	1K	1%	1/4W	
R1929	1-215-445-00	METAL	10K	1%	1/4W	
R1930	1-215-397-00	METAL	100	1%	1/4W	
R1931	1-215-397-00	METAL	100	1%	1/4W	
R1932	1-215-453-00	METAL	22K	1%	1/4W	
R1933	1-215-453-00	METAL	22K	1%	1/4W	
R1934	1-215-429-00	METAL	2.2K	1%	1/4W	
R1935	1-247-881-00	CARBON	120K	5%	1/4W	
R1937	1-215-445-00	METAL	10K	1%	1/4W	

<VARIABLE RESISTOR>

RV901	1-241-765-11	RES, ADJ, CARBON 22K	
RV902	1-241-765-11	RES, ADJ, CARBON 22K	
RV903	1-241-765-11	RES, ADJ, CARBON 22K	
RV904	1-241-765-11	RES, ADJ, CARBON 22K	
RV905	1-241-765-11	RES, ADJ, CARBON 22K	
RV906	1-241-765-11	RES, ADJ, CARBON 22K	
RV907	1-241-765-11	RES, ADJ, CARBON 22K	
RV908	1-241-765-11	RES, ADJ, CARBON 22K	

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REF.NO.	PART NO.	DESCRIPTION	REMARK
RV909	1-241-765-11	RES, ADJ, CARBON 22K	
RV910	1-241-765-11	RES, ADJ, CARBON 22K	
RV911	1-241-628-11	RES, ADJ, CARBON 2.2K	
RV912	1-241-765-11	RES, ADJ, CARBON 22K	
RV913	1-241-769-11	RES, ADJ, CARBON 470K	
RV914	1-241-630-11	RES, ADJ, CARBON 10K	
RV915	1-241-630-11	RES, ADJ, CARBON 10K	
RV916	1-241-765-11	RES, ADJ, CARBON 22K	
RV917	1-241-765-11	RES, ADJ, CARBON 22K	
RV918	1-241-765-11	RES, ADJ, CARBON 22K	
RV919	1-241-765-11	RES, ADJ, CARBON 22K	
RV920	1-241-765-11	RES, ADJ, CARBON 22K	
RV921	1-241-765-11	RES, ADJ, CARBON 22K	
RV922	1-241-765-11	RES, ADJ, CARBON 22K	
RV923	1-241-765-11	RES, ADJ, CARBON 22K	
RV924	1-241-765-11	RES, ADJ, CARBON 22K	
RV925	1-241-765-11	RES, ADJ, CARBON 22K	
RV926	1-241-765-11	RES, ADJ, CARBON 22K	
RV927	1-241-765-11	RES, ADJ, CARBON 22K	
RV928	1-241-630-11	RES, ADJ, CARBON 10K	
RV929	1-241-765-11	RES, ADJ, CARBON 22K	
RV930	1-241-630-11	RES, ADJ, CARBON 10K	
RV931	1-241-765-11	RES, ADJ, CARBON 22K	
RV932	1-241-765-11	RES, ADJ, CARBON 22K	
RV933	1-241-765-11	RES, ADJ, CARBON 22K	
RV934	1-241-765-11	RES, ADJ, CARBON 22K	
RV935	1-241-765-11	RES, ADJ, CARBON 22K	
RV936	1-241-765-11	RES, ADJ, CARBON 22K	
RV937	1-241-630-11	RES, ADJ, CARBON 10K	
RV938	1-241-630-11	RES, ADJ, CARBON 10K	
RV939	1-241-630-11	RES, ADJ, CARBON 10K	
RV940	1-241-765-11	RES, ADJ, CARBON 22K	
RV941	1-241-765-11	RES, ADJ, CARBON 22K	
RV942	1-241-765-11	RES, ADJ, CARBON 22K	
RV943	1-241-765-11	RES, ADJ, CARBON 22K	
RV944	1-241-765-11	RES, ADJ, CARBON 22K	
RV945	1-241-765-11	RES, ADJ, CARBON 22K	
RV946	1-241-765-11	RES, ADJ, CARBON 22K	
RV947	1-241-765-11	RES, ADJ, CARBON 22K	
RV948	1-241-765-11	RES, ADJ, CARBON 22K	
RV949	1-241-765-11	RES, ADJ, CARBON 22K	
RV950	1-241-765-11	RES, ADJ, CARBON 22K	
RV951	1-241-765-11	RES, ADJ, CARBON 22K	
RV952	1-241-765-11	RES, ADJ, CARBON 22K	
RV953	1-241-765-11	RES, ADJ, CARBON 22K	
RV954	1-241-765-11	RES, ADJ, CARBON 22K	
RV956	1-241-765-11	RES, ADJ, CARBON 22K	
RV957	1-249-417-11	CARBON 1K 5% 1/4W	
RV958	1-241-765-11	RES, ADJ, CARBON 22K	
RV959	1-241-765-11	RES, ADJ, CARBON 22K	
RV961	1-241-765-11	RES, ADJ, CARBON 22K	
RV962	1-241-765-11	RES, ADJ, CARBON 22K	
RV963	1-241-765-11	RES, ADJ, CARBON 22K	
RV964	1-241-765-11	RES, ADJ, CARBON 22K	
RV965	1-241-765-11	RES, ADJ, CARBON 22K	
RV966	1-241-765-11	RES, ADJ, CARBON 22K	
RV967	1-241-765-11	RES, ADJ, CARBON 22K	
RV968	1-241-765-11	RES, ADJ, CARBON 22K	
RV969	1-241-765-11	RES, ADJ, CARBON 22K	
RV970	1-241-765-11	RES, ADJ, CARBON 22K	
RV971	1-241-765-11	RES, ADJ, CARBON 22K	
RV972	1-241-765-11	RES, ADJ, CARBON 22K	
RV973	1-241-765-11	RES, ADJ, CARBON 22K	
RV974	1-241-765-11	RES, ADJ, CARBON 22K	
RV975	1-241-765-11	RES, ADJ, CARBON 22K	
RV976	1-241-765-11	RES, ADJ, CARBON 22K	
RV977	1-241-765-11	RES, ADJ, CARBON 22K	
RV978	1-241-765-11	RES, ADJ, CARBON 22K	
RV979	1-241-765-11	RES, ADJ, CARBON 22K	
RV980	1-238-019-11	RES, ADJ, CARBON 47K	
RV981	1-241-765-11	RES, ADJ, CARBON 22K	
RV982	1-241-765-11	RES, ADJ, CARBON 22K	

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	*1-651-293-11	H BOARD *******	
	*4-357-710-00	HOLDER, LED	

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1601	1-124-907-11	ELECT 10MF 20% 50V	
C1602	1-124-907-11	ELECT 10MF 20% 50V	
C1603	1-124-907-11	ELECT 10MF 20% 50V	
C1604	1-124-907-11	ELECT 10MF 20% 50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
H1	*1-564-525-11	PLUG, CONNECTOR 10P	
H2	*1-564-517-11	PLUG, CONNECTOR 2P	
H16	*1-564-521-11	PLUG, CONNECTOR 6P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1601	8-719-812-41	DIODE TLR124	
D1602	8-719-812-41	DIODE TLR124	
D1603	8-719-108-12	DIODE RD9.1EW	
D1604	8-719-108-12	DIODE RD9.1EW	
D1605	8-719-108-12	DIODE RD9.1EW	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1601	8-741-810-09	IC SBX1810-09	

<JACK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
J1601	1-565-839-11	PIN JACK BLOCK 3P	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
R1601	1-249-430-11	CARBON 12K 5% 1/4W	
R1602	1-249-425-11	CARBON 4.7K 5% 1/4W	
R1603	1-249-421-11	CARBON 2.2K 5% 1/4W	
R1604	1-249-419-11	CARBON 1.5K 5% 1/4W	
R1606	1-247-807-31	CARBON 100 5% 1/4W	
R1607	1-247-807-31	CARBON 100 5% 1/4W	
R1608	1-249-411-11	CARBON 330 5% 1/4W	
R1609	1-249-411-11	CARBON 330 5% 1/4W	
R1610	1-247-804-11	CARBON 75 5% 1/4W	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S1601	1-571-731-11	SWITCH, TACTIL	
S1602	1-571-731-11	SWITCH, TACTIL	
S1603	1-571-731-11	SWITCH, TACTIL	
S1604	1-571-731-11	SWITCH, TACTIL	
S1605	1-571-731-11	SWITCH, TACTIL	
S1606	⚠1-571-731-21	SWITCH, TACTIL	

REF.NO.	PART NO.	DESCRIPTION				REMARK
S1607	1-571-731-11	SWITCH, TACTIL				

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*A-1373-461-A UT BOARD, COPMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1154	1-164-096-11	CERAMIC	0.01MF		50V	
C1158	1-126-233-11	ELECT	22MF	20%	25V	
C1160	1-126-233-11	ELECT	22MF	20%	25V	
C1161	1-126-233-11	ELECT	22MF	20%	25V	
C1165	1-124-903-11	ELECT	1MF	20%	50V	
C1166	1-124-903-11	ELECT	1MF	20%	50V	
C1167	1-124-903-11	ELECT	1MF	20%	50V	
C1168	1-124-903-11	ELECT	1MF	20%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
UT22	*1-565-928-11	CONNECTOR (TUB) 30P	
UT23	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P	
UT35	*1-564-518-11	PLUG, CONNECTOR 3P	

<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D1160	8-719-110-36	DIODE RD13ESB2	
D1163	8-719-110-36	DIODE RD13ESB2	
D1164	8-719-110-36	DIODE RD13ESB2	
D1165	8-719-110-36	DIODE RD13ESB2	
D1166	8-719-110-36	DIODE RD13ESB2	
D1167	8-719-110-36	DIODE RD13ESB2	
D1168	8-719-110-36	DIODE RD13ESB2	
D1169	8-719-110-36	DIODE RD13ESB2	
D1170	8-719-110-36	DIODE RD13ESB2	

<JACK>

REF.NO.	PART NO.	DESCRIPTION	REMARK
J1003	1-573-970-11	BLOCK, (S) TERMINAL	
J1004	1-764-890-11	TERMINAL BLOCK, S 3P	
J1008	1-573-969-11	JACK BLOCK, PIN	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1164	1-247-895-00	CARBON	470K	5%	1/4W	
R1165	1-247-895-00	CARBON	470K	5%	1/4W	
R1174	1-247-895-00	CARBON	470K	5%	1/4W	
R1175	1-247-895-00	CARBON	470K	5%	1/4W	
R1176	1-247-804-11	CARBON	75	5%	1/4W	
R1178	1-247-895-00	CARBON	470K	5%	1/4W	
R1179	1-247-895-00	CARBON	470K	5%	1/4W	
R1180	1-247-804-11	CARBON	75	5%	1/4W	
R1181	1-247-804-11	CARBON	75	5%	1/4W	
R1188	1-247-804-11	CARBON	75	5%	1/4W	
R1191	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1192	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1193	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1194	1-249-425-11	CARBON	4.7K	5%	1/4W	
R1196	1-249-429-11	CARBON	10K	5%	1/4W	

<SWITCH>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S1150	1-571-731-11	SWITCH, TACTIL	

****

*A-1373-463-A V BOARD, COMPLETE
****

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C1551	1-124-122-11	ELECT	100MF	20%	50V	
C1552	1-124-122-11	ELECT	100MF	20%	50V	
C1553	1-102-824-00	CERAMIC	470PF	5%	50V	
C1554	1-102-824-00	CERAMIC	470PF	5%	50V	
C1555	1-130-483-00	MYLAR	0.01MF	5%	50V	
C1556	1-130-483-00	MYLAR	0.01MF	5%	50V	
C1557	1-102-824-00	CERAMIC	470PF	5%	50V	
C1558	1-102-824-00	CERAMIC	470PF	5%	50V	
C1559	1-102-824-00	CERAMIC	470PF	5%	50V	
C1560	1-102-824-00	CERAMIC	470PF	5%	50V	
C1561	1-130-483-00	MYLAR	0.01MF	5%	50V	
C1562	1-130-483-00	MYLAR	0.01MF	5%	50V	
C1563	1-130-483-00	MYLAR	0.01MF	5%	50V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
V22	1-573-300-11	CONNECTOR, BOARD TO BOARD 18P	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC1551	8-759-145-58	IC UPC4558C	
IC1552	8-759-912-77	IC LM324N	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q1551	8-729-231-60	TRANSISTOR 2SD1406-YGR	
Q1552	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1553	8-729-231-60	TRANSISTOR 2SD1406-YGR	
Q1554	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1555	8-729-231-60	TRANSISTOR 2SD1406-YGR	
Q1556	8-729-141-83	TRANSISTOR 2SB1094-LK	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1540	1-215-445-00	METAL	10K	1%	1/4W	
R1541	1-215-445-00	METAL	10K	1%	1/4W	
R1542	1-215-445-00	METAL	10K	1%	1/4W	
R1551	1-215-445-00	METAL	10K	1%	1/4W	
R1552	1-215-423-00	METAL	1.2K	1%	1/4W	
R1553	1-249-417-11	CARBON	1K	5%	1/4W	
R1554	1-215-445 00	METAL	10K	1%	1/4W	
R1555	1-215-375-00	METAL	12	1%	1/4W	
R1556	1-215-375-00	METAL	12	1%	1/4W	
R1557	1-215-375-00	METAL	12	1%	1/4W	
R1558	1-215-445-00	METAL	10K	1%	1/4W	
R1559	1-215-445-00	METAL	10K	1%	1/4W	
R1560	1-215-445-00	METAL	10K	1%	1/4W	
R1561	1-215-423-00	METAL	1.2K	1%	1/4W	
R1562	1-215-423-00	METAL	1.2K	1%	1/4W	
R1563	1-215-445-00	METAL	10K	1%	1/4W	
R1564	1-249-417-11	CARBON	1K	5%	1/4W	
R1565	1-215-445-00	METAL	10K	1%	1/4W	
R1566	1-215-375-00	METAL	12	1%	1/4W	
R1567	1-215-375-00	METAL	12	1%	1/4W	
R1568	1-215-375-00	METAL	12	1%	1/4W	
R1569	1-215-445-00	METAL	10K	1%	1/4W	
R1570	1-215-445-00	METAL	10K	1%	1/4W	
R1571	1-249-417-11	CARBON	1K	5%	1/4W	
R1572	1-215-445-00	METAL	10K	1%	1/4W	

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1573	1-215-375-00	METAL	12	1%	1/4W	
R1574	1-215-375-00	METAL	12	1%	1/4W	
R1575	1-215-375-00	METAL	12	1%	1/4W	
R1576	1-215-445-00	METAL	10K	1%	1/4W	
R1577	1-215-445-00	METAL	10K	1%	1/4W	
R1578	1-249-417-11	CARBON	1K	5%	1/4W	
R1579	1-249-417-11	CARBON	1K	5%	1/4W	
R1580	1-249-417-11	CARBON	1K	5%	1/4W	
R1581	1-249-432-11	CARBON	18K	5%	1/4W	
R1582	1-249-432-11	CARBON	18K	5%	1/4W	

****

*A-1390-412-A ZR BOARD, COMPLETE
****

<CONNECTOR>

ZR1	*1-564-522-11	PLUG, CONNECTOR 7P
ZR2	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P

<RESISTOR>

R1903	1-249-414-11	CARBON	560	5%	1/4W
R1904	1-249-414-11	CARBON	560	5%	1/4W

****

*A-1390-413-A ZG BOARD, COMPLETE
****

<CONNECTOR>

ZG2	1-564-523-11	PLUG, CONNECTOR 8P
ZG19	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P

<RESISTOR>

R1913	1-249-414-11	CARBON	560	5%	1/4W
R1914	1-249-414-11	CARBON	560	5%	1/4W

****

*A-1390-414-A ZB BOARD, COMPLETE
****

<CONNECTOR>

ZB3	1-564-524-11	PLUG, CONNECTOR 9P
ZB20	*1-691-292-11	PIN, CONNECTOR (PC BOARD) 3P

<RESISTOR>

R1923	1-249-414-11	CARBON	560	5%	1/4W
R1924	1-249-414-11	CARBON	560	5%	1/4W

****

*A-1390-415-A N BOARD, COMPLETE
****

4-382-854-11 SCREW (M3X10), P, SW (+)

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION			REMARK
C801	1-123-024-21	ELECT	33MF		160V
C803	1-136-729-11	FILM	1.5MF	5%	400V
C804	1-106-383-00	MYLAR	0.047MF		200V
C805	1-102-030-00	CERAMIC	330PF	10%	500V
C806	1-130-495-00	MYLAR	0.1MF	5%	50V
C807	1-124-667-11	ELECT	10MF	20%	50V
C808	1-126-183-11	ELECT	1000MF	20%	16V
C809	1-124-903-11	ELECT	1MF	20%	50V
C810	1-124-903-11	ELECT	1MF	20%	50V
C811	1-124-902-00	ELECT	0.47MF	20%	50V
C812	1-102-973-00	CERAMIC	100PF	5%	50V
C813	1-102-244-00	CERAMIC	220PF	10%	500V
C814	1-106-391-12	MYLAR	0.1MF	10%	200V
C815	1-106-367-00	MYLAR	0.01MF	10%	200V
C816	1-124-907-11	ELECT	10MF	20%	50V
C817	1-124-119-00	ELECT	330MF	20%	16V
C818	1-102-824-00	CERAMIC	470PF	5%	50V
C819	1-124-907-11	ELECT	10MF	20%	50V
C820	1-124-907-11	ELECT	10MF	20%	50V
C821	1-124-907-11	ELECT	10MF	20%	50V
C822	1-104-792-51	ELECT	33MF	20%	16V
C823	1-124-907-11	ELECT	10MF	20%	50V
C824	1-104-792-51	ELECT	33MF	20%	16V
C825	1-104-792-51	ELECT	33MF	20%	16V
C826	1-124-907-11	ELECT	10MF	20%	50V
C827	1-124-907-11	ELECT	10MF	20%	50V
C828	1-124-907-11	ELECT	10MF	20%	50V
C829	1-104-792-51	ELECT	33MF	20%	16V
C830	1-124-907-11	ELECT	10MF	20%	50V
C831	1-106-220-00	MYLAR	0.1MF	10%	100V
C832	1-124-907-11	ELECT	10MF	20%	50V
C833	1-124-916-11	ELECT	22MF	20%	50V
C834	1-130-487-00	MYLAR	0.022MF	5%	50V
C835	1-124-927-11	ELECT	4.7MF	20%	50V
C836	1-130-475-00	MYLAR	0.0022MF	5%	50V
C837	1-136-169-00	FILM	0.22MF	5%	50V
C838	1-130-475-00	MYLAR	0.0022MF	5%	50V
C839	1-102-106-00	CERAMIC	100PF	10%	50V
C840	⚠ 1-136-807-11	FILM	0.018MF	3%	1.6KV
C842	1-130-471-00	MYLAR	0.001MF	5%	50V
C850	1-136-169-00	FILM	0.22MF	5%	50V
C851	1-124-907-11	ELECT	10MF	20%	50V
C852	1-124-907-11	ELECT	10MF	20%	50V
C853	1-106-220-00	MYLAR	0.1MF	10%	100V
C854	1-104-793-51	ELECT	470MF	20%	50V
C855	1-126-804-11	ELECT	100MF	20%	50V
C856	1-162-114-00	CERAMIC	0.0047MF		2KV
C858	1-124-119-00	ELECT	330MF	20%	16V
C888	1-124-903-11	ELECT	1MF	20%	50V

<CONNECTOR>

N1	1-506-348-99	PIN, CONNECTOR 3P
N2	*1-564-508-11	PLUG, CONNECTOR 5P
N3	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
N4	*1-564-507-11	PLUG, CONNECTOR 4P
N5	*1-564-508-11	PLUG, CONNECTOR 5P
N7	1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P
N8	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P
N9	1-506-348-99	PIN, CONNECTOR 3P
N10	*1-564-511-11	PLUG, CONNECTOR 8P
N16	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
N20	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
N21	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P
N30	1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P
N851	*1-506-371-00	PIN, CONNECTOR 2P
N853	*1-506-371-00	PIN, CONNECTOR 2P

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<DIODE>

REF.NO.	PART NO.	DESCRIPTION	REMARK
D801	8-719-928-08	DIODE ERD28-08S	
D802	8-719-302-43	DIODE EL1Z	
D803	8-719-109-85	DIODE RD5.1ESB2	
D804	8-719-911-19	DIODE 1SS119	
D805	8-719-911-19	DIODE 1SS119	
D806	8-719-109-85	DIODE RD5.1ESB2	
D807	8-719-109-85	DIODE RD5.1ESB2	
D808	8-719-911-19	DIODE 1SS119	
D809	8-719-911-19	DIODE 1SS119	
D810	8-719-911-19	DIODE 1SS119	
D811	8-719-109-85	DIODE RD5.1ESB2	
D812	8-719-911-19	DIODE 1SS119	
D813	8-719-911-19	DIODE 1SS119	
D814	8-719-911-19	DIODE 1SS119	
D815	8-719-110-36	DIODE RD13ESB2	
D820	8-719-911-19	DIODE 1SS119	
D850	8-719-109-71	DIODE RD3.9ESB1	
D851	⚠8-719-903-09	DIODE V30N	
D852	8-719-911-19	DIODE 1SS119	
D853	⚠8-719-903-09	DIODE V30N	
D891	8-719-110-49	DIODE RD18ESB2	
D892	8-719-110-49	DIODE RD18ESB2	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC801	8-759-231-58	IC TA7812S	
IC802	8-759-103-93	IC UPC393C	
IC803	8-759-503-91	IC TL082ACP	
IC804	8-759-103-93	IC UPC393C	
IC805	8-759-100-75	IC UPC1394C	

<COIL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
L802	1-409-570-11	COIL, CHOKE 1.2MMH	
L803	1-459-313-00	COIL WITH CORE (HWC)	
L803	1-459-313-00	COIL WITH CORE (HWC)	
L804	1-410-482-31	INDUCTOR 100UH	
L805	⚠1-424-603-11	COIL, CHOKE 1.05MMH	

<NEON LAMP>

REF.NO.	PART NO.	DESCRIPTION	REMARK
NL801	1-519-108-99	LAMP, NEON	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q801	⚠8-729-201-61	TRANSISTOR 2SC2555-1	
Q802	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q803	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q806	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q811	⚠8-729-016-32	TRANSISTOR 2SC4927-01	
Q820	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q851	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q852	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q853	8-729-823-81	TRANSISTOR 2SC4632LS-CB7	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R801	⚠1-216-378-71	METAL OXIDE	5.6	5%	2W	F
R802	⚠1-247-799-91	CARBON	47	5%	1/4W	
R803	⚠1-215-869-71	METAL OXIDE	1K	5%	1W	F
R804	1-249-429-11	CARBON	10K	5%	1/4W	
R805	1-249-423-11	CARBON	3.3K	5%	1/4W	
R806	1-249-425-11	CARBON	4.7K	5%	1/4W	
R807	1-249-441-11	CARBON	100K	5%	1/4W	
R808	1-249-417-11	CARBON	1K	5%	1/4W	
R809	1-249-417-11	CARBON	1K	5%	1/4W	
R810	1-249-441-11	CARBON	100K	5%	1/4W	
R811	1-249-421-11	CARBON	2.2K	5%	1/4W	
R812	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R813	⚠1-215-921-71	METAL OXIDE	4.7K	5%	3W	F
R814	1-249-409-11	CARBON	220	5%	1/4W	
R815	1-249-415-11	CARBON	680	5%	1/4W	
R816	1-214-777-00	METAL	100K	1%	1/4W	
R817	1-215-471-00	METAL	120K	1%	1/4W	
R818	1-215-471-00	METAL	120K	1%	1/4W	
R819	1-215-450-00	METAL	16K	1%	1/4W	
R820	1-215-451-00	METAL	18K	1%	1/4W	
R821	1-249-423-11	CARBON	3.3K	5%	1/4W	
R822	1-249-433-11	CARBON	22K	5%	1/4W	
R823	1-249-429-11	CARBON	10K	5%	1/4W	
R824	1-215-469-00	METAL	100K	1%	1/4W	
R825	1-215-453-00	METAL	22K	1%	1/4W	
R826	1-214-962-00	METAL	820K	1%	1/4W	
R827	1-214-764-00	METAL	30K	1%	1/4W	
R828	1-215-455-00	METAL	27K	1%	1/4W	
R829	1-215-455-00	METAL	27K	1%	1/4W	
R830	⚠1-215-928-71	METAL OXIDE	68K	5%	3W	F
R831	⚠1-215-928-71	METAL OXIDE	68K	5%	3W	F
R832	1-249-417-11	CARBON	1K	5%	1/4W	
R833	1-249-419-11	CARBON	1.5K	5%	1/4W	
R834	1-249-419-11	CARBON	1.5K	5%	1/4W	
R835	1-215-429-00	METAL	2.2K	1%	1/4W	
R836	1-215-435-00	METAL	3.9K	1%	1/4W	
R837	1-249-433-11	CARBON	22K	5%	1/4W	
R838	1-249-435-11	CARBON	33K	5%	1/4W	
R839	1-249-438-11	CARBON	56K	5%	1/4W	
R840	1-249-434-11	CARBON	27K	5%	1/4W	
R841	1-249-429-11	CARBON	10K	5%	1/4W	
R842	1-249-435-11	CARBON	33K	5%	1/4W	
R843	1-249-423-11	CARBON	3.3K	5%	1/4W	
R844	1-249-433-11	CARBON	22K	5%	1/4W	
R845	1-249-435-11	CARBON	33K	5%	1/4W	
R846	1-249-429-11	CARBON	10K	5%	1/4W	
R847	1-214-761-00	METAL	22K	1%	1/4W	
R848	1-215-429-00	METAL	2.2K	1%	1/4W	
R849	1-215-421-00	METAL	1K	1%	1/4W	
R850	1-215-429-00	METAL	2.2K	1%	1/4W	
R851	1-215-404-00	METAL	200	1%	1/4W	
⧗R852	⚠	METAL			1/4W	
R853	1-215-469-00	METAL	100K	1%	1/4W	
R854	1-249-430-11	CARBON	12K	5%	1/4W	
R855	1-215-469-00	METAL	100K	1%	1/4W	
R856	1-249-430-11	CARBON	12K	5%	1/4W	
R857	1-249-433-11	CARBON	22K	5%	1/4W	
R858	1-249-413-11	CARBON	470	5%	1/4W	
R859	1-249-435-11	CARBON	33K	5%	1/4W	
R860	1-249-441-11	CARBON	100K	5%	1/4W	
R861	1-249-421-11	CARBON	2.2K	5%	1/4W	
R862	1-249-434-11	CARBON	27K	5%	1/4W	
R863	1-249-431-11	CARBON	15K	5%	1/4W	
R864	1-249-428-11	CARBON	8.2K	5%	1/4W	

- The components identified by ⧗ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation Should replacement be required, replace only with the value originally used

N **U**

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R865	1-249-440-11	CARBON	82K	5%	1/4W	
R866	1-249-436-11	CARBON	39K	5%	1/4W	
R867	1-249-437-11	CARBON	47K	5%	1/4W	
R868	1-249-428-11	CARBON	8.2K	5%	1/4W	
R871	1-249-440-11	CARBON	82K	5%	1/4W	
R872	1-249-423-11	CARBON	3.3K	5%	1/4W	
R873	1-249-441-11	CARBON	100K	5%	1/4W	
R874	1-249-435-11	CARBON	33K	5%	1/4W	
R875	1-249-421-11	CARBON	2.2K	5%	1/4W	
R876	1-215-426-00	METAL	1.6K	1%	1/4W	
R877	1-249-435-11	CARBON	33K	5%	1/4W	
R878	⚠ 1-247-879-91	CARBON	100K	5%	1/4W	
R880	1-249-429-11	CARBON	10K	5%	1/4W	
R881	1-214-761-00	METAL	22K	1%	1/4W	
R882	1-249-433-11	CARBON	22K	5%	1/4W	
R883	1-249-417-11	CARBON	1K	5%	1/4W	
R884	⚠ 1-215-894-51	METAL OXIDE	2.2K	5%	2W	F
R885	1-249-438-11	CARBON	56K	5%	1/4W	
R886	1-249-414-11	CARBON	560	5%	1/4W	
R887	1-215-397-00	METAL	100	1%	1/4W	
R888	1-249-410-11	CARBON	270	5%	1/4W	
R889	1-249-417-11	CARBON	1K	5%	1/4W	
R890	1-249-417-11	CARBON	1K	5%	1/4W	
R892	1-249-417-11	CARBON	1K	5%	1/4W	F
R893	1-215-453-00	METAL	22K	1%	1/4W	
R894	1-249-401-11	CARBON	47	5%	1/4W	
R895	1-202-731-00	SOLID	10M	20%	1/2W	
R896	1-260-111-11	CARBON	10K	5%	1/2W	
R903	1-247-735-11	SOLID	47	20%	1/2W	
R904	⚠ 1-215-928-71	METAL OXIDE	68K	5%	3W	F

<SPARK GAP>

SG801	1-519-422-11	GAP, SPARK

<TRANSFORMER>

T801	⚠ 1-437-078-11	TRANSFORMER, HORIZONTAL DRIVE
T802	1-437-090-00	HDT
T803	⚠ 8-598-939-00	TRANSFORMER ASSY, FLYBACK (NX-2631//A4S)

****

*A-1394-534-A U BOARD, COMPLETE
****

<CAPACITOR>

C1004	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1005	1-124-903-11	ELECT	1MF	20%	50V
C1006	1-164-096-11	CERAMIC	0.01MF		50V
C1007	1-126-233-11	ELECT	22MF	20%	25V
C1008	1-126-233-11	ELECT	22MF	20%	25V
C1013	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C1018	1-124-903-11	ELECT	1MF	20%	50V
C1022	1-124-482-11	ELECT	33MF	20%	25V
C1026	1-164-048-11	CERAMIC	12PF	5%	50V
C1027	1-164-048-11	CERAMIC	12PF	5%	50V
C1028	1-124-482-11	ELECT	33MF	20%	25V
C1029	1-124-282-00	ELECT	22MF	20%	16V
C1030	1-124-478-11	ELECT	100MF	20%	25V
C1031	1-164-058-11	CERAMIC	33PF	5%	50V
C1033	1-126-233-11	ELECT	22MF	20%	25V
C1034	1-124-282-00	ELECT	22MF	20%	16V
C1036	1-124-282-00	ELECT	22MF	20%	16V
C1037	1-124-282-00	ELECT	22MF	20%	16V
C1039	1-124-478-11	ELECT	100MF	20%	25V
C1047	1-124-902-00	ELECT	0.47MF	20%	50V
C1048	1-124-903-11	ELECT	1MF	20%	50V
C1049	1-126-233-11	ELECT	22MF	20%	25V
C1051	1-124-902-00	ELECT	0.47MF	20%	50V
C1055	1-124-477-11	ELECT	47MF	20%	16V
C1056	1-124-499-11	ELECT	1MF	20%	50V
C1059	1-124-499-11	ELECT	1MF	20%	50V
C1060	1-124-499-11	ELECT	1MF	20%	50V
C1061	1-124-499-11	ELECT	1MF	20%	50V
C1062	1-102-129-00	CERAMIC	0.01MF	10%	50V
C1066	1-126-101-11	ELECT	100MF	20%	16V

<CONNECTOR>

U12	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P
U13	1-573-300-21	CONNECTOR, BOARD TO BOARD 18P
U16	*1-564-513-11	PLUG, CONNECTOR 10P
U22	*1-565-930-11	CONNECTOR (RECEPTACLE) 30P
U23	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)
U47	*1-564-506-11	PLUG, CONNECTOR 3P

<COM FILTER BLOCK>

CM1002	1-466-162-31	BLOCK, COM FILTER (CFB-4)

<DIODE>

D1005	8-719-110-35	DIODE RD13ESB1
D1009	8-719-110-35	DIODE RD13ESB1
D1010	8-719-110-35	DIODE RD13ESB1
D1011	8-719-110-35	DIODE RD13ESB1
D1017	8-719-110-35	DIODE RD13ESB1
D1020	8-719-109-66	DIODE RD3.3ESB2

<IC>

IC1002	8-752-067-28	IC CXA1545AS

<COIL>

L1001	1-408-422-00	INDUCTOR	120UH
L1002	1-408-422-00	INDUCTOR	120UH

<TRANSISTOR>

Q1018	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q1022	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q1023	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q1029	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q1032	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q1033	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q1034	8-729-119-76	TRANSISTOR 2SA1175-HFE

<RESISTOR>

R1015	1-249-425-11	CARBON	4.7K	5%	1/4W
R1026	1-249-425-11	CARBON	4.7K	5%	1/4W
R1036	1-249-440-11	CARBON	82K	5%	1/4W
R1037	1-249-440-11	CARBON	82K	5%	1/4W
R1038	1-249-440-11	CARBON	82K	5%	1/4W
R1057	1-249-441-11	CARBON	100K	5%	1/4W

REF.NO.	PART NO.	DESCRIPTION				REMARK
R1061	1-249-409-11	CARBON	220	5%	1/4W	
R1062	1-249-441-11	CARBON	100K	5%	1/4W	
R1063	1-249-409-11	CARBON	220	5%	1/4W	
R1066	1-215-437-00	METAL	4.7K	1%	1/4W	
R1067	1-215-437-00	METAL	4.7K	1%	1/4W	
R1068	1-215-437-00	METAL	4.7K	1%	1/4W	
R1069	1-215-437-00	METAL	4.7K	1%	1/4W	
R1070	1-249-411-11	CARBON	330	5%	1/4W	
R1071	1-249-431-11	CARBON	15K	5%	1/4W	
R1073	1-249-431-11	CARBON	15K	5%	1/4W	
R1077	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1078	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1079	1-247-807-31	CARBON	100	5%	1/4W	
R1080	1-215-423-00	METAL	1.2K	1%	1/4W	
R1081	1-215-421-00	METAL	1K	1%	1/4W	
R1089	1-247-807-31	CARBON	100	5%	1/4W	
R1094	1-247-807-31	CARBON	100	5%	1/4W	
R1096	1-247-807-31	CARBON	100	5%	1/4W	
R1099	1-249-413-11	CARBON	470	5%	1/4W	
R1110	1-247-807-31	CARBON	100	5%	1/4W	
R1118	1-249-413-11	CARBON	470	5%	1/4W	
R1133	1-247-807-31	CARBON	100	5%	1/4W	
R1134	1-247-807-31	CARBON	100	5%	1/4W	
R1137	1-249-411-11	CARBON	330	5%	1/4W	
R1147	1-247-807-31	CARBON	100	5%	1/4W	
R1148	1-247-807-31	CARBON	100	5%	1/4W	
R1149	1-249-417-11	CARBON	1K	5%	1/4W	
R1150	1-247-807-31	CARBON	100	5%	1/4W	
R1151	1-247-807-31	CARBON	100	5%	1/4W	
R1152	1-249-417-11	CARBON	1K	5%	1/4W	

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*A-1394-535-A S BOARD, COMPLETE
****

*4-033-528-01 CASE (UPPER LID), SHIELD, P4

<CAPACITOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
C3403	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C3408	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C3409	1-124-477-11	ELECT	47MF	20%	16V	
C3411	1-104-792-51	ELECT	33MF	20%	16V	
C3474	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C3475	1-126-157-11	ELECT	10MF	20%	16V	
C3476	1-136-165-00	FILM	0.1MF	5%	50V	
C3477	1-163-135-00	CERAMIC CHIP	560PF	5%	50V	
C3478	1-163-038-00	CERAMIC CHIP	0.1MF		25V	
C3479	1-137-367-11	FILM	0.0033MF	5%	50V	
C3480	1-136-495-11	FILM	0.068MF	5%	50V	
C3481	1-126-157-11	ELECT	10MF	20%	16V	
C3482	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C3483	1-126-157-11	ELECT	10MF	20%	16V	
C3484	1-163-038-00	CERAMIC CHIP	0.1MF		25V	

<CONNECTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
S47	*1-564-506-11	PLUG, CONNECTOR 3P	
S46	*1-564-506-11	PLUG, CONNECTOR 3P	
S43	*1-564-508-11	PLUG, CONNECTOR 5P	
S45	*1-564-511-11	PLUG, CONNECTOR 8P	

<IC>

REF.NO.	PART NO.	DESCRIPTION	REMARK
IC3401	8-759-403-44	IC MN1280-S	
IC3402	8-759-256-49	IC M37102M8-A12FP	
IC3442	8-759-084-09	IC Z8612812PSC	

<COIL>

REF.NO.	PART NO.	DESCRIPTION		REMARK
L3401	1-408-421-00	INDUCTOR	100UH	
L3402	1-408-421-00	INDUCTOR	100UH	

<TRANSISTOR>

REF.NO.	PART NO.	DESCRIPTION	REMARK
Q3401	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q3402	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

<RESISTOR>

REF.NO.	PART NO.	DESCRIPTION				REMARK
R3401	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3402	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3403	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3404	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3405	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R3406	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3407	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3408	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3409	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3420	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3421	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3422	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3423	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R3425	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3426	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R3427	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3428	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3429	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3430	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3431	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R3432	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R3433	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3434	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3435	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R3436	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3437	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R3438	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R3439	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3440	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3441	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R3442	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R3451	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R3458	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3474	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3476	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R3477	1-216-295-00	METAL GLAZE	0	5%	1/10W	

<CRYSTAL>

REF.NO.	PART NO.	DESCRIPTION	REMARK
X3401	1-577-358-21	VIBRATOR, CERAMIC	

****

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite
Ne les remplacer que par une piece portant le numero specifie.

The components identified by shading and mark ⚠ are critical for safety
Replace only with part number specified.

MISCELLANEOUS

****

REF.NO.	PART NO.	DESCRIPTION	REMARK
	⚠1-241-744-11	RESISTOR ASSY (HIGH-VOLTAGE)	
	⚠1-453-108-11	DC BLOCK, HIGH-VOLTAGE	
	1-504-533-11	SPEAKER (16CM)	
	*1-555-400-00	CABLE, PIN	
	1-561-306-00	JACK, PIN (F)	
	⚠1-696-002-12	CORD, POWER(WITH NOISE FILTER) 7.0A/125V	
	⚠8-451-441-11	DEFLECTION YOKE Y829PA	
V901	⚠8-736-072-05	PICTURE TUBE 07MAB2(G)	
V901	⚠8-736-073-05	PICTURE TUBE 07MAB2(B)	
V901	⚠8-736-074-05	PICTURE TUBE 07MAB2(R)	

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ACCESSARIES AND PACKING MATERIALS

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REF.NO.	PART NO.	DESCRIPTION	REMARK
	3-754-297-21	INSTRUCTION	
	3-754-298-21	MANUAL, INSTRUCTION	
	3-754-298-31	MANUAL, INSTRUCTION (KP-46S55(CND)/53S55(CND))	
	3-754-298-41	MANUAL, INSTRUCTION (KP-46S55(U)/53S55(U))	
	*4-030-895-01	JOINT	
	*4-037-126-01	INDIVIDUAL CARTON (KP-46S55)	
	*4-037-127-01	TRAY (KP-46S55)	
	*4-037-128-01	CUSHION (UPPER) (ASSY) (KP-46S55)	
	*4-037-129-01	CUSHION (LOWER) (ASSY) (KP-46S55)	
	*4-037-165-01	INDIVIDUAL CARTON (KP-53S55)	
	*4-037-166-01	TRAY (KP-53S55)	
	*4-037-167-01	CUSHION (UPPER) (ASSY) (KP-53S55)	
	*4-037-168-01	CUSHION (LOWER) (ASSY) (KP-53S55)	
	*4-037-328-01	PLATE, TOP (KP-53S55)	
	*4-037-674-01	PLATE, TOP (KP-46S55)	
	*4-037-918-01	PLATE, BOTTOM (KP-46S55)	
	*4-038-043-03	PLATE, BOTTOM (KP-53S55)	
	*4-041-423-01	SHEET, PROTECTION (KP-46S55)	
	*4-041-425-01	BAG, PROTECTION (KP-46S55)	
	*4-041-426-01	BAG, PROTECTION (KP-53S55)	
	*4-042-309-01	PALLET, CUSHION (KP-46S55)	
	*4-042-463-01	SHEET, PROTECTION (KP-53S55)	

REMOTE COMMANDER

REF.NO.	PART NO.	DESCRIPTION	REMARK
	1-467-653-11	REMOTE COMMANDER (RM-Y125)	
	9-903-826-01	COVER, BATTERY (FOR RM-Y125)	

Sony Corporation
TV Group

English
94DL02494-1
Printed in USA

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